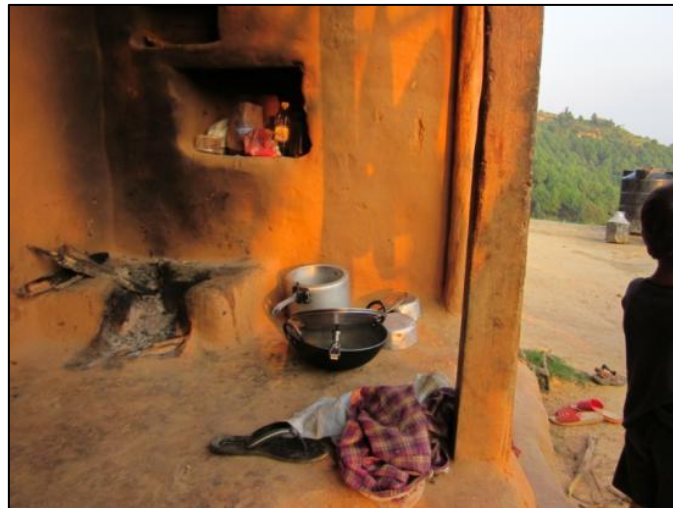


Pilot Field Test of Community-based Injury  
Survey with Burns Module:  
Nuwakot and Rasuwa Districts, Nepal 2016





# **Pilot Field Test of Community-based Injury Survey with Burns Module: Nuwakot and Rasuwa Districts, Nepal 2016**

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## Abbreviations

%	Percent
ADRA	Adventist Development and Relief Agency
CI	Confidence interval
Df	Degrees of freedom
GACC	Global Alliance for Clean Cookstoves
HDI	Human Development Index
HERD	Health Research and Social Development Forum
HKH	Hindu Kush Himalayan
ICIMOD	International Centre for Integrated Mountain Development
IQR	Inter-quartile range
km <sup>2</sup>	square kilometres
LPG	Liquefied petroleum gas
m	Metre
n	number
N	Number
NGO	Non-government organization
ODK	Open Data Kit
P	Probability
PHC	Primary Healthcare Centre
PPI	Progress Out of Poverty Index
Q	Question number
q	1 - probability
UMN	United Mission to Nepal
UN	United Nations
USD	United States dollars
VDC	Village Development Committee
WHO	World Health Organization

## Executive Summary

In low- and middle-income countries (LMIC) the lack of resources to treat burn patients and the challenges facing survivors due to long-term impacts of their injury mean that burn prevention is a priority. Development of reliable and valid instruments to measure injuries at community level, including burn injuries, will help to fill gaps in the data on prevalence and risk factors to inform effective injury prevention strategies.

The majority of injuries occur at home, in particular burn injuries. Globally, most burn injuries are related to cooking, an important activity of daily life. Effective policies are needed that can reduce injury rates in the context of the home.

The WHO Violence and Injury Prevention Programme and the Global Alliance for Clean Cookstoves funded this pilot field test of the “Community-based Injury Survey with New Burns Module”. The burns module gathers detailed information on the cause of burn injury, as well as health-seeking behaviour and impacts (health and socio-economic). The primary objective was to test the survey in operational conditions; secondary objectives were to obtain indicative incidence rates of different types of injury, their causes, risk factors and impacts. This report presents a comprehensive description of the survey process and a summary of the survey results.

The rural districts of Nuwakot and Rasuwa in Nepal were selected for the field test as they have a high proportion of households using biomass fuel in traditional open fires for cooking. In addition, these areas were severely affected by the earthquakes in April and May 2015, permitting the measurement of earthquake-related injuries and their impacts. Fatal injuries in the last 5 years (2012-2016) and non-fatal injuries in the last 18 months (April 25 2015 to December 2016) were measured, starting with the first earthquake event.

This pilot survey was undertaken in 1,080 households in challenging field conditions; the recruitment and training processes of the field researchers, and technical and logistical support were critical for the success of the survey. The use of the electronic data collection platform, Kobo Collect, is highly recommended and HERD International has experience with its use which may be beneficial to other groups. The questionnaire performed well and only minor revisions have been suggested.

The overall annual rate of non-fatal injuries in the survey was 30.6 per 1,000 (95% CI 28.0-33.1). The injury rates obtained with this survey are consistent with those from another recent community survey conducted in children in rural Nepal and also data from Bangladesh from a large national community-based survey. There were 18 burn injuries in the sampled population (annual rate of burn injury 2.6 per 1,000 [95% CI 1.1-4.1]); approximately half of the burn injuries were in children 18 years and under. The morning was a very common time for burn injury and the majority of burns occurred in the home (83.3%), 80% of these in the kitchen. Half of the burn injuries were directly associated with

cooking. Scalds were the most common cause of burn injury (55.6%), followed by flame burns (38.9%) and contact burns (5.5%).

The survey highlighted difficulties in the mode of transportation of injured persons to health facilities and revealed significant levels of impairment and disability and socioeconomic impacts due to injuries. Approximately one third of injured persons had not yet been able to return fully to their normal activity at the time of the survey, and of those injured more than 6 months previously, 26.6% have a current disability. For those able to return to work fully after injury, the median length of time from injury to return to work was 35.4 days. In nearly one third of all injury cases the household had to take out a loan to pay for medical treatment or to make up for loss of income.

Approximately 7% of households sampled in Rasuwa district had at least one death due to the 2015 earthquake, compared to 2.2% of households sampled in Nuwakot, and almost all deaths were in adults > 18 years. The earthquake fatality rate in adults > 18 years was 12.7 per 1,000 (95% CI 8.6-16.8). The highest non-fatal earthquake injury rate was also in adults > 18 years (34.6 per 1,000 [95% CI 27.9-41.3]). The survey data collected on the medium-term health and socio-economic impacts of injuries from this natural disaster will form the basis of a significant publication on the gap in resources that exists for transporting and treating injured persons in rural Nepal.

These examples show how data collected using the “Community-based Injury Survey with New Burns Module” can be used to directly inform policies and interventions for injury prevention (e.g. safer cooking methods) and health services required for injury treatment. A series of publications in the international literature is planned to follow this report and provide more detailed analysis of the results. The revised survey tool can be freely used and adapted for future research and trials. Questions from the survey will also be included in future household surveys for non-communicable diseases, including those being developed in ‘Surveys for Urban Equity’, a Global Challenge Research Fund project funded by the Medical Research Council, UK.

*Dr Hilary Wallace, Project leader*

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Sincere thanks must also be given to the HERD International team (Uden, Sushil, Sangeeta and Subash) for their dedication and professional approach to this project in all phases, from planning, through to field logistics and data management. The field researchers who collected the data under challenging conditions deserve special mention.

This project was possible because of my special working relationship with the HERD International team in Nepal facilitated by Dr Helen Elsey, University of Leeds. I extend sincere thanks to Helen for her warm and generous mentorship, and also to Dr Judith Berman at The University of Western Australia for encouraging me to apply for an Australian Government Endeavour Fellowship in 2012 to pursue my international health research goals.

This report is dedicated to all the families in Nepal who lost loved ones in the earthquakes of April and May 2015.

*Hilary Wallace, Project leader*

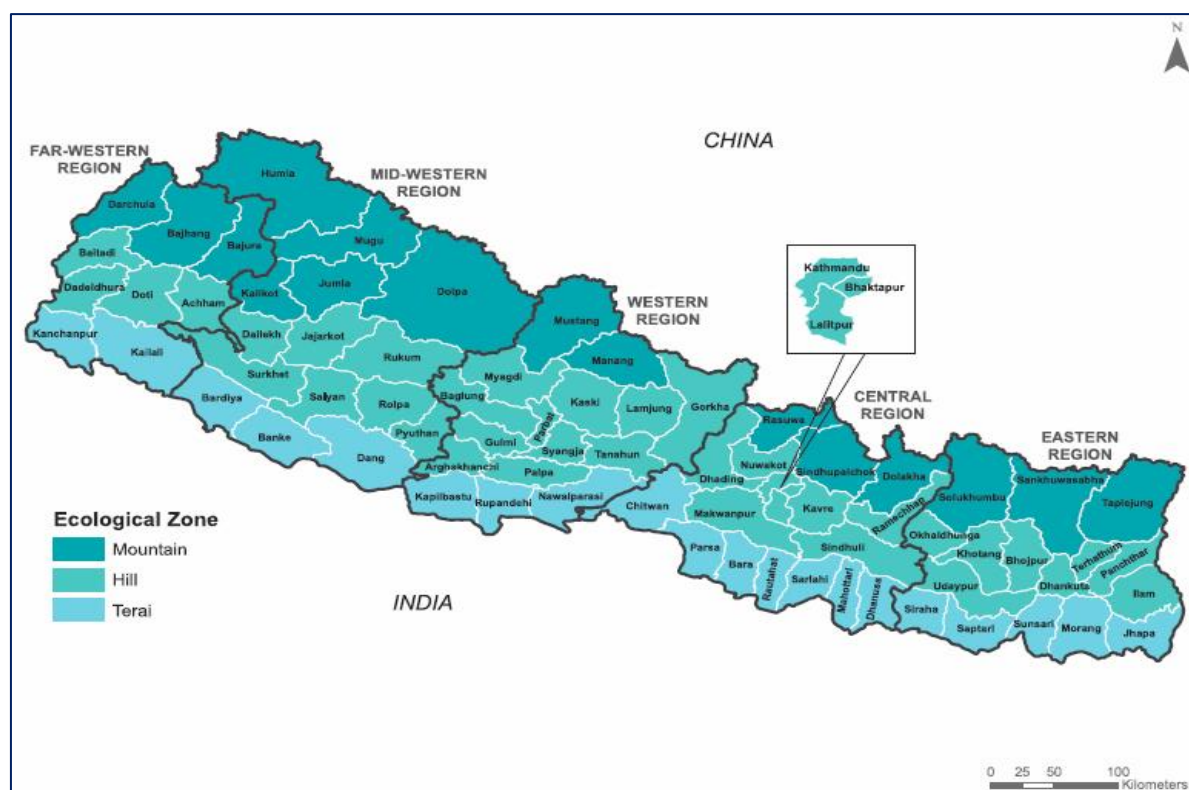


## 1. Introduction

### 1.1 Country background

#### 1.1.1 Nepal - Geography

Nepal covers a total land area of 147,181 square kilometres (km<sup>2</sup>), with India to the east, south, and west and China to the north (Figure 1). It is a land-locked country, approximately 885 kilometres (km) in length (east to west) and 193 km in width (north to south).



**Figure 1 Map of Nepal**

(Adapted from Ministry of Health and Population 2012)

Nepal is divided into three distinctive topographic / ecological zones: mountains, hills, and Terai (plains). The mountain zone (Himalaya mountain range) accounts for 35% (51,817 km<sup>2</sup>) of the land area with altitude ranging from 4,877 to 8,848 metres above sea level. As a consequence of the difficult landscape, only 7% of the total population lives in this zone, and transportation and communication services can be limited (Central Bureau of Statistics 2012).

The hill zone ranges in altitude from 610 to 4,876 metres above sea level. Approximately 43% of the total population of Nepal live in this zone, which covers 42% (61,345 km<sup>2</sup>) of the total land area. The population distributions in the hill areas vary, with a fairly dense population in the valleys but markedly reduced population in areas above 2,000 metres and very low numbers of people living above 2,500 metres.

The Terai zone in the southern part of the country comprises 23% (34,019 km<sup>2</sup>) of the total land area. It represents the most fertile part of the country and contains 50% of the population (Central Bureau of Statistics 2012). Related to its relatively flat terrain, transportation and communication facilities are more developed in this zone than in the hill and mountain zones of the country.

Nepal is divided into five development / administrative regions: Eastern, Central, Western, Mid-Western and Far-Western. Similarly, the country is divided into 14 zones and 75 administrative districts. The districts are further divided into smaller units, called village development committees (VDCs) and municipalities, in rural and urban areas, respectively. Currently, there are 3,915 VDCs and 58 municipalities. Each VDC is composed of 9 wards, and the number of wards in each municipality ranges from 9 to 35. Kathmandu, the capital, is the principal urban centre of Nepal (Central Bureau of Statistics 2015).

### 1.1.2 Population

The population of Nepal is approximately 26.6 million (Central Bureau of Statistics 2012), with 39% of the population under 15 years of age, 11% under 5 years of age and about 50% aged between 15 and 59 years (Ministry of Health and Population 2011). Approximately 17% (4.5 million) of the population reside in urban areas, with Kathmandu district having the highest population density in Nepal.

There are over 100 diverse ethnic/caste groups, each with its own distinct language and culture (Central Bureau of Statistics 2003). Most groups originated from the Indo-Europeans, who constitute about 79% of the population, and the Sino-Tibetans, who account for approximately 18% of the population. Over the last several hundred years and even earlier in some areas, whether they were Hindu or not, all Nepali people were socially defined by the caste system (Bennett et al. 2008).

During 1999 - 2006, Nepal experienced a civil war that ended with the Comprehensive Peace Accord signed on 21 November 2006. As an impact of this decade-long insurgency, there was a subsequent internal displacement of persons and population shift of many people from their homes in rural areas to urban areas, particularly to Kathmandu.

### 1.1.3 Nuwakot and Rasuwa districts – Geography and population

#### 1.1.3.1 Nuwakot district

Nuwakot is a hill district located in the Bagmati Zone of the Central Development Region. It has Sindhupalchowk and Kathmandu districts in the east, Dhading and Rasuwa districts in the west, Rasuwa in the north and Dhading and Kathmandu districts in the south. The elevation ranges from 518 metres to 4,876 metres above mean sea level. Trishuli (Bidur) is the district headquarters and the district is divided into 62 VDCs. The population of the district according to the 2011 Census (Central Bureau of Statistics 2012) is 277,471 comprising 132,787 males and 144,684 females in 59,215 households (mean household size

4.68). Agriculture, including cropping and small scale livestock production, is the main source of occupation and livelihood of the majority of population.

#### 1.1.3.2 Rasuwa district

Rasuwa is a mountain district also located in the Bagmati Zone of the Central Development Region and has elevation ranging from 614 metres to 7,227 metres above mean sea level. Tibet autonomous area of China is located in the north, Nuwakot district in the south, Sindhupalchok district is in the east and Dhading district is in the west. Dhunche is the district headquarters. The district is divided into 18 VDCs, several of which are inaccessible by road. The population of the district according to the 2011 Census (Central Bureau of Statistics 2012) is 43,300 comprising 21,475 males and 21,825 females in 9,778 households (mean household size 4.43). Forests cover 31.43% of the land area while 16.63% (Langtang mountain range in the north) is always snow-covered. The great majority of the population draws its livelihood from agriculture, which also represents the main source of income.



Figure 2 Location of Nuwakot and Rasuwa districts, Nepal

#### 1.1.4 Economic and Social Development

Nepal is a 'less developed country' ranked 144<sup>th</sup> on the Human Development Index (HDI) in 2016 (United Nations Development Programme 2014). Poor economic development and provision of basic infrastructure and essential services are serious challenges, along with low participation in secondary education (United Nations Development Programme 2014). The overall literacy rate (5 years and older) in 2011 was reported to be 66% (Central Bureau of Statistics 2012). Gender and caste inequality In Nepal remains an important issue in relation to health, education and livelihood outcomes (Asian Development Bank 2010). Nepal has limited burns specialist facilities and there is a lack of staff trained in burn care throughout urban and rural areas (Interburns 2013).

### 1.1.5 Household Characteristics

Access to safe water and sanitation in Nepal are still critical (Ministry of Health and Population 2012). Most households (89%) obtain drinking water from an improved source, with urban areas having better access than rural areas (93% vs. 88%). The most common source of drinking water in urban areas is water piped into the dwelling / yard / plot, with more than 40% of households having access via this source. In contrast, a tube well or borehole is the most common source of drinking water in rural areas, used by 40% of rural households. The majority of households (82%) do not treat drinking water, and rural households are particularly likely not to do so (87%, compared to 54% of urban households) (Ministry of Health and Population 2012).

Seventy three (73) % and 97% of rural and urban households, respectively, have access to electricity (Ministry of Health and Population 2012), and 33% of households use one room for sleeping.

The presence and extent of indoor pollution are dependent on cooking practices, the places used for cooking, and the types of fuel used. Seventy two percent of households cook inside the house, 20% cook in a separate building and 8% cook outdoors (Ministry of Health and Population 2012).

More than 8 in 10 rural households still use solid fuel for cooking, compared with 3 in 10 households in urban areas (Ministry of Health and Population 2012). Use of liquid petroleum gas, natural gas, and biogas is much more common in urban (68%) than rural (16%) areas. Use of gas for cooking was reported to have increased significantly over the period of 2006 to 2011 in both urban and rural households. Use of solid fuel for cooking declined from 83% in 2006 to 75% in 2011, primarily due to a decline in use in rural areas (Ministry of Health and Population 2012).

## 1.2 Injuries

### 1.2.1 Global impact of injuries

Injuries are a global public health problem with approximately 5.8 million deaths annually as a result of injuries, accounting for 10% of the world's deaths (World Health Organization 2010). Among the causes of injury are acts of violence and self-harm, road traffic accidents, burns, drowning, falls and poisonings. The millions of deaths that result from injuries represent only a small proportion of those injured. Many more experience non-fatal injuries that lead to hospitalisation, emergency department or medical practitioner treatment, or treatment that does not involve formal medical care (World Health Organization 2010). Many survivors of injury experience significant long-term physical and psychosocial health impacts and disabilities (World Health Organization 2010; Gosselin et al. 2009).

More than 90% of deaths that result from injury occur in low- and middle-income countries (LMIC). Injury death rates are higher in poorer countries in all regions of the world than in

higher income countries. For example, injury mortality rates reported for low- and middle-income countries of the South-East Asia Region <sup>a</sup> are 116.6 deaths per 100,000 population compared with high-income countries of the European Region of 45.6 deaths per 100,000 population (World Health Organization 2010). Global statistics for burn injury show similar patterns. According to WHO estimates, 90% of burn deaths occur in lower-middle or low-income countries, where burn injury is also a leading cause of disability-adjusted life-years (DALYs) lost (World Health Organization 2010). Decreasing the global burden of injuries is one of the main challenges for public health (Krug 2004).

A large trial in rural Malawi found the rate of serious burns in children under 5 years (death, led to disability, life-threatening, led to hospitalisation) was 0.12 per 100 child years (95% CI 0.05–0.20), and the rate of non-serious burns was approximately 119 per 1,000 child years, in households using open fires for cooking (Mortimer et al. 2017).

### 1.2.2 Injuries in Nepal

A study during 2008 and 2009 by the Nepal Health Research Council (Nepal Health Research Council 2009), using emergency department data from tertiary health facilities, estimated the prevalence of injury in Nepal to be 15 per 100,000 persons. Hospital-based surveillance only captures a small portion of information about burn injuries because the vast majority of burn patients are cared for outside speciality referral centres (Forjuoh 2006). Sixty percent of injury-related events were for those aged between 15 and 44 years of age, and 68% were males. Unintentional (or accidental) injuries accounted for 77% of all injuries and included injuries caused by road traffic accidents 29%, poisoning 9%, falls 27%, fire 2% and drowning 0.1%. Approximately 60% of burn injuries were for those aged between 15 and 44 years, and 55% of burn cases were male. These data include burns due to fire (flame) and do not include other important causes of burn, for example scalds and electrical burns.

A community survey of injuries in children (< 18 years) undertaken by Pant and colleagues in Makwanpur, a district south of Kathmandu, estimated an annual rate of non-fatal injuries of 24.6/1,000 children; rates for boys were double (32.7/1,000) those for girls (16.8/1,000) (Pant et al. 2015a). Falls were the most common cause of non-fatal child injuries, followed by burns in preschool children and road traffic injuries in adolescents. The rates and the mechanisms of injury varied by age and gender. Falls and burns were the most common mechanisms of injury amongst young children around rural homes.

### 1.2.3 Nepal earthquakes 2015

Nepal experienced a major earthquake on 25 April 2015 (Gorkha earthquake), which devastated large parts of the country. The main earthquake of 25 April and several other aftershocks, including that of 12 May, caused the death of about 9,000 people, injury to a reported 22,000, and loss and damage equivalent to USD 7 billion (Shrestha et al. 2016).

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<sup>a</sup> The WHO South-East Asia Region (low- and middle-income countries) comprises Bangladesh, Bhutan, Democratic People's Republic of Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand, Timor-Leste.

Approximately half a million (498,852) houses were completely damaged and 256,697 partially damaged (National Planning Commission 2015). According to an ICIMOD report on the impact of the earthquakes, “Almost all sectors – social (housing and human settlements, health, education, and cultural heritage), productive (agriculture, irrigation, commerce, industry, tourism, and finance), infrastructure (electricity, communications, community infrastructure, transport, and water and sanitation), and cross-cutting (governance, disaster risk reduction, and environment and forestry) were seriously affected” (Shrestha et al. 2016).

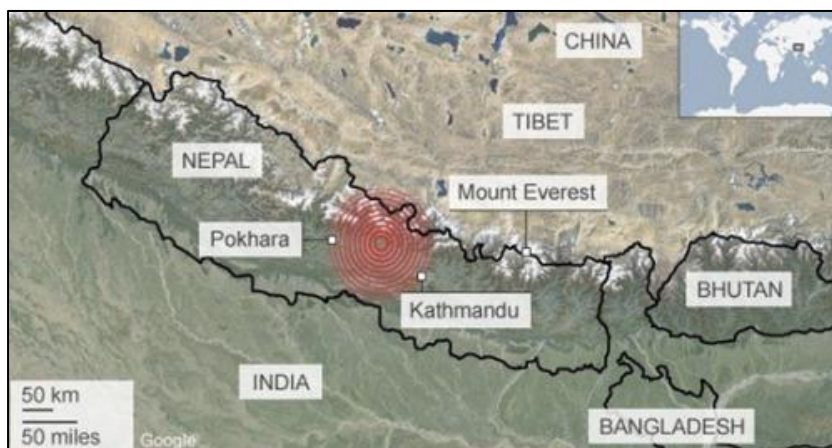
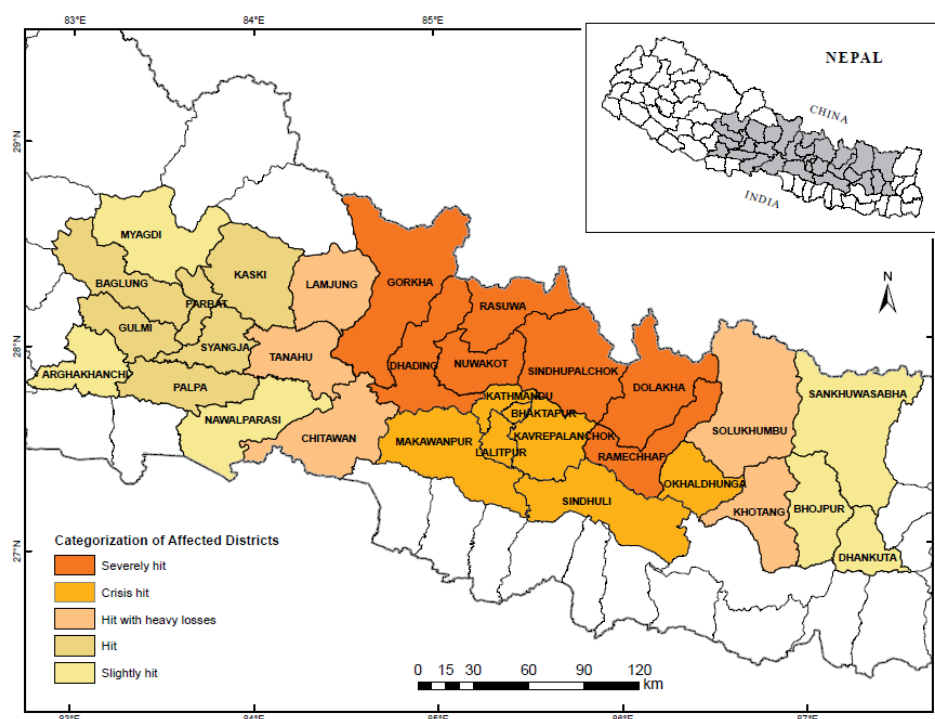


Figure 3 Epicentre of Nepal earthquake, April 25 2015 (Gorkha earthquake)  
<http://www.bbc.com/news/world-asia-32461019>. Accessed 27 March 2017]

The people of the Hindu Kush Himalayan (HKH) region are very vulnerable to natural hazards, a vulnerability compounded by their poor social conditions. Nuwakot and Rasuwa districts were amongst the seven most severely-affected districts in Nepal. The earthquakes pushed an additional 2.5 to 3.5% of the Nepalese population (more than 700,000 people) into poverty in 2015/16 (National Planning Commission 2015).





**Figure 4 Categorization of districts affected by Gorkha earthquake 2015 (National Planning Commission 2015)**

#### 1.2.4 Community-based injury survey with burns module

Many low-income countries do not have evidence from robust community-based surveys to estimate the burden of injury-related deaths and morbidity (Pant et al. 2015b). Community data provide a different perspective on the health status of a population, independent from data given by health services (Sethi et al. 2004). Injury experts have recommended the use of community-based surveys for increasing the knowledge-base to inform appropriate burns prevention strategies (Chandran et al. 2010; World Health Organization 2011). The World Health Organization (WHO) *Guidelines for Conducting Community Surveys on Injuries and Violence* (Sethi et al. 2004) includes a standardized tool for the systematic collection of injury data but this tool gathers limited information about risk factors specific for burn injury.

In 2013/14 the Global Alliance for Clean Cookstoves (GACC) Working Group on Burn Data developed a list of potential domains and questions for a community-based survey of burn injury in low- and middle-income countries. Hilary Wallace was invited to consolidate the suggestions from the working group into an expansion of the WHO *Guidelines for Conducting Community Surveys on Injuries and Violence*. The new tool enables the collection of data about the rate of burn injuries in the community (mortality and morbidity), household hazards and risk factors for burn injury, health-seeking behaviour, treatment of burn injury and the impact of burn injury. A draft document was presented to

a meeting of burn injury experts with the Global Alliance for Clean Cookstoves in Washington DC (May 2014).

Hilary Wallace and Health Research and Social Development Forum (HERD) Nepal then pre-tested the new survey in the Kathmandu Valley, Nepal, between December 2014 and June 2015. This included refinement of the draft survey, formatting of the questions into a tool for data collection, translation into Nepali, and testing of questions in the community and with local burn experts. After testing in 31 households the survey tool was further revised based on the feedback from the respondents, the interviewers, other HERD personnel and three local Nepali burn injury experts. The key finding was that the precise case-definition of injury and the scope of possible injuries needed to be clearly described and reinforced during the interview. Examples given by the interviewer were very important.

The objective of this next phase, the pilot field test, was to test the survey at an operational scale in a real-world context. The test was undertaken in a sample of 1,080 households in two districts, Nuwakot and Rasuwa, where biomass use for cooking is high (approximately 90%). In addition, these districts were severely affected by the earthquake in April 2015. The process outcomes will provide guidance for future large-scale field trials of the community-based injury survey with burns module (operational practicality, performance of questions). The data analysis will provide some injury estimates from the survey data, including measurement of deaths and non-fatal injuries caused by the earthquake. Risk factors for injury and impacts of injury on individuals and households can be explored.

The results of this field trial will enable the standardised collection of household-based data on burn injuries and their detailed causes, circumstances and impacts in low-income community settings. For example, use of the refined survey tool in population-based studies will help to determine the actual burden of burn injury attributable to cooking on open fires, including the potential for safer cookstoves to reduce this burden.

## 2. Epidemiology of accidental injuries in Nuwakot and Rasuwa districts, Nepal

### 2.1 Objectives

1. To pilot test the community-based injury survey (with burn injury module) in field conditions using a cluster sampling survey design
2. To describe the patterns of injuries observed (fatal and non-fatal) and risk factors
3. To describe the impacts of the injuries on the individual and household
4. To explore the link between unimproved cookstoves and burn injury in children 14 years and under



## 2.2 Methods

### 2.2.1 Study Population

Nuwakot and Rasuwa districts from the Central Development Region were purposively selected. The reported household use of biomass/firewood in these districts is 89.8% in Nuwakot and 89.6% in Rasuwa (Central Bureau of Statistics 2012). Nuwakot is a hill district and Rasuwa is a mountain district. Both districts were classified as severely affected by the April 2015 earthquake (National Planning Commission 2015).

### 2.2.2 Ethical approval

Ethical approval was obtained from the Nepal Health Research Council on 28 July 2016 (Reg No. 154/2016).

### 2.2.3 Sample size

The sample size of 1,080 households was selected based on resource availability, not on the incidence of injury and burn.

The confidence interval for the incidence of burn injury in children 14 years and under was estimated for the nominated sample size, using the normal approximation to the binomial distribution.

$$\text{Standard deviation: } \sigma = \sqrt{np(1-p)}$$

$n$  (target sample size; children 14 years and under in 1,080 households)  $\sim 2,000$

$p$  (probability of burn injury in a child 14 years and under in one year) = 0.5%\*

*[\*Burn injury incidence in 0-14 age group from a Bangladesh study (Mashreky et al. 2009) = 315 per 100,000; the present study uses less conservative case definition (loss of 1 day or more of normal activity, compared to loss of 3 days or more of normal activity), therefore 500 burn injuries per 100,000 was selected as a reasonable approximation (0.5%)]*

$$\sigma = \sqrt{np(1-p)} = \sqrt{2,000 \times 0.005 (0.995)} = 3.154$$

$$95\% \text{ Confidence Interval (CI)} = 1.96 \times \sigma = 6.182$$

Thus, it is estimated that in a sample of 2,000 children aged 14 and under there will be 10 cases (2,000 / 100,000 X 500) of burn injury (95% CI 3.818 – 16.182).

### 2.2.4 Selection of clusters

Cluster sampling was conducted in two districts in the Central Region of Nepal, Nuwakot (62 VDC; 558 wards; population = 277,471) and Rasuwa (18 VDC; 162 wards; population = 43,300). The sampling frame included 68,993 households from 720 clusters from the two

districts (Central Bureau of Statistics 2012). A cluster is a group of households in the same geographical area; in this study the unit of the cluster was the ward. Twenty six (26) VDCs were randomly sampled from Nuwakot district, and 4 VDCs from Rasuwa district. Within each VDC one ward was randomly selected. Within each ward (cluster) 30 households were selected using the method of probability proportionate sampling relative to the number of households as determined by the 2011 Census (total number of households =  $30 \times 36 = 1080$ ). Field researchers mapped and listed all households in the cluster before calculating the interval to be used in the interval sampling process. [Note: One VDC selected for sampling in Rasuwa, Dadagaun, was excluded as the whole community was relocated after the April Earthquake. Another VDC, Bhore, was sampled in its place.]

**Table 1 Clusters selected for survey**

District	Cluster #	VDC	Ward No.	Households
Nuwakot	1	Balkumari	7	55
	2	Betini	6	42
	3	Bidur Municipality	2	269
	4	Bidur Municipality	5_A	246
	5	Bidur Municipality	9_B	203
	6	Bungtang	5	30
	7	Chaughada	2	110
	8	Dangsing	2	104
	9	Duipipal	7	296
	10	Gaunkharka	3	58
	11	Ghyangphedi	6	79
	12	Kabilas	1	113
	13	Halde Kalika	1	78
	14	Kaule	5	115
	15	Khanigaun	2	93
	16	Kumari	5	305
	17	Madanpur	1	188
	18	Mahakali	6	59
	19	Okharpauwa	2	85
	20	Ralukadevi	6	134
	21	Samari	1	91
	22	Samundratar	8	43
	23	Suryamati	1	102
	24	Taruka	8	112
	25	Thaprek	2	94
	26	Urleni	5	83
Rasuwa	27	Bhorle	2	205
	28	Laharepouwa	1	203
	29	Ramche	5	55
	30	Timure	4	33

### 2.3 Implementation process

The implementation process of the field test is described in detail in Appendix 1, “A Report on the Implementation Process of the Community-based Injury Survey with Burn Module: Pilot Field Testing.” This report covers:

- Questionnaire translation, revision and programming
- Ethical approval
- Field researcher recruitment
- Training of the field researchers
- Summary of the survey logistics
- Field manual
- Paper versions of the questionnaire (Nepali and English)
- Field implementation
- Field experience sharing meeting
- Data quality assurance
- Data quality control



Figure 5 Field researcher training and monitoring

### 2.4 Data collection

Data was collected in the field using the community-based injury survey with burns module during the period November-December 2016. The processes involved in data collection are described in detail in the Field Manual contained in Appendix 1, “A Report on the Implementation Process of the Community-based Injury Survey with Burn Module: Pilot Field Testing.”

Respondents for the household questionnaire were the head of the household or any knowledgeable person of the household  $\geq 18$  years of age. For the injury questionnaire, the respondent was the injury victim (if present at time of interview, current age  $\geq 18$  years and is able to understand and/or respond to the questions) or another knowledgeable HH member (proxy) (if victim  $< 18$  years, is not present, or is unable to understand and/or respond to the questions).

The data for this study was collected by using the predesigned questionnaire by interviewing the relevant respondents who were the target population for this study. Data was collected electronically using a pre-programmed tablet. Direct face to face interview was used for the process of data collection.

Samsung Tablets 3 with Android version 4.4 were used as devices for electronic questionnaires. KoBo Collect (KoBo Toolbox, Harvard Humanitarian Initiative, <http://www.kobotoolbox.org/>) was used for downloading the questionnaire, viewing, recording responses and uploading the questionnaire. The data collected in the field with the tablets were uploaded using the SIM card enabled internet data into the cloud based server where the uploaded data was stored. The syntax programmed in the Open Data Kit (ODK) controlled the skip patterns.



Figure 6 Field researchers taking interviews with household head

## 2.5 Variables

The community-based survey included the following variables. The complete questionnaire used in the field test is included in Appendix 1 (Nepali and English versions), and a revised version (English) is included in Appendix 4.

### 2.5.1 Household questionnaire

- i) *Respondent characteristics* – age, gender
- ii) *Household characteristics* - caste/ethnicity; number of household members; age and gender of household members; current residence (in relation to pre-earthquake); likelihood of being in poverty [using the Progress Out of Poverty Index (PPI) (see 2.4.5) - household size, income sources, bedrooms, outside walls, roof material, separate kitchen, type of stove, toilet, phones, land]

- iii) *Household energy use* – type of stove, cooking fuel, other fuels for cooking, cooking location, separate kitchen, source of lighting, water heating method, gas geyser location, home heating fuel, type of space heater
- iv) *Respondent supplementary information* - burn first aid knowledge (free text)
- v) *Injury-related deaths (household level)* - injury-related death/s in household (Y/N); number of injury deaths; ; earthquake-related (Y/N); likelihood of household being in poverty (PPI)
- vi) *Non-fatal Injuries (household level)* - injuries in household (Y/N); number of injury deaths; earthquake-related (Y/N); likelihood of household being in poverty (Progress Out of Poverty Index, PPI)
- vii) *Injury-related deaths (individual level)* - nature of injury causing death; earthquake-related (Y/N), intent; age at death; place of death; time of death
- viii) *Non-fatal Injuries (individual level – household roster)*: relationship to respondent, age, gender, injury (Y/N)

### 2.5.2 Injury questionnaire

- i) *Non-fatal Injuries - Individual level (household members with an injury)*: respondent for injury questions (victim/proxy); nature of physical injury; occupation; date of injury; time of injury; place of injury; activity at time of injury; mechanism of injury; earthquake-related (Y/N); intent; use of alcohol
- ii) *Injury treatment* – first aid at scene; person who provided first aid; seeking medical care; transport to health facility; transport time; place of medical care; admission to hospital/ health facility; length of hospital stay

### 2.5.3 Burn injury module

- i) *Burn injuries* – age; gender; main activity contributing to burn injury; primary cause of burn; fuel source (if flame burn); stove height (if cooking or space heating burn injury); equipment under repair (if activity contributing to burn injury was equipment repair); accidental movement; equipment problem; unsafe activity; ignition of clothing; medical predisposition; medical reason (if medical predisposition); location in home (if injured at home); workplace activity (if injured at workplace); place of chemical storage (if chemical burn)
- iii) *Burn injury treatment* – cool running water applied (Y/N); length of time cool running water applied; other home-based first aid; accompaniment by friend or relative to health facility; operations (Y/N) (if admitted to a hospital)

### 2.5.4 Impact of injury

- x) *Impairment and disability* - effect on usual activities for one or more days; return to normal activity (Y/N); length of time to return to normal activities (fully and partially); physical disability; nature of disability



- xi) *Economic* - loss of employment, loss of days of work/school by carer (household member) [Y/N]; loss of days of work/school by carer (household member) (length of time); decline in household income; decline in food consumption; loans to pay for medical treatment; dependence on charity; selling possessions

### 2.5.5 Progress Out of Poverty Index

The Progress Out of Poverty Index (Schreiner 2013) uses Nepal's 2010 Living Standards Survey to construct an easy-to-use scorecard that estimates the likelihood that a household has expenditure below a given poverty line ([www.progressoutofpoverty.org/country/nepal](http://www.progressoutofpoverty.org/country/nepal)). The scorecard uses ten simple indicators that field workers can collect quickly (Appendix 3). The simple poverty scorecard is a practical way to measure poverty rates and to track changes in poverty rates over time.

The sum of scorecard points for a household is called the score and range from 0 (most likely below a poverty line) to 100 (least likely below a poverty line). The scores themselves have only relative units. To get absolute units, scores must be converted to poverty likelihoods, that is, probabilities of being below a poverty line. This is done via a look-up tables (Appendix 3). For example, scores of 25–29 have a poverty likelihood of 49.8 percent using the new-definition national poverty line, and scores of 30–34 have a poverty likelihood of 38.9 percent.

## 2.6 Recall period and case definition of injury

For injury-related deaths the recall period was 5 years. For non-fatal injuries the recall period was approximately 18 months (from the April 25 2015 earthquake event onwards). A verbal description of injury was given to the respondent, and the flip chart of pictograms and photos (Appendix 2) was used to further communicate the meaning of injury mechanisms and types of injury. For example, "An injury is any physical damage to the body such as a wound, bruise, burn, fracture, internal injury, poisoning, loss of consciousness due to a blow to the head, suffocation/strangulation. Injuries can result from a falling building, a road traffic accident, a fall, fire or heat, electrocution, poisoning, drowning, gun shot, sharp instrument such as a knife, an animal bite, chemicals or acid on the skin, or toxic fumes." The case definition of a (non-fatal) injury in this survey was an injury serious enough to need medical treatment or to change the person's 'normal' activity for one or more days.

## 2.7 Statistics

Basic descriptive analyses are presented including percentages for categorical variables, and means, standard deviations and minimum and maximum values (or median and interquartile range) for continuous variables. Chi square tests were applied to categorical variables to assess associations and independent samples T-tests were applied for the comparison of continuous variables, with the level of significance set at 0.05. Injury and death incidence rates (adjusted to 12-month rates pro-rata) were calculated per 1,000

persons. Confidence intervals (95% CI) are given when the normal approximation to the binomial distribution can be applied (that is, when  $npq > 10$ : where  $n$  is the size of the target population;  $p$  is the probability of injury and  $q = (1-p)$ ). Earthquake rates are point rates. All statistical analyses were performed using IBM SPSS version 22.0.

## 2.8 Results

### 2.8.1 Household sociodemographic characteristics by district

The survey was completed in 1,080 households; 936 in Nuwakot and 144 in Rasuwa. The total number of persons in these households was 4,598 (3,997 Numakot; 601 Rasuwa) with a mean household size in Nuwakot and Rasuwa of 4.163 and 5.008 respectively.

Approximately 30% of the sampled population were aged 14 years and under ( $n=1,398$ ) (Table 1). Adults over 18 years of age comprised 61.6% of the household members. Females comprised 54.3% of the household members, and males 45.7% (Table 2). With respect to caste/ethnicity of the household, most households described themselves as Hill Janajati (Table 4). There was a higher proportion of Hill Dalit and Thakuri/Dashnami households in Nuwakot than in Rasuwa (Chi-square;  $df=3$ ;  $p=0.011$ ).

The likelihood of a household being in poverty (%) (PPI scores converted to the likelihood of being below the Nepal national [100%] poverty line) was significantly different between districts (Table 5). According to this measure, the households surveyed in Nuwakot were significantly more likely to be in poverty than in Rasuwa (2.67% difference in mean likelihoods; T-test;  $p=0.017$ ).

There was a significant contrast in the current housing situation between districts, with half of the households in Rasuwa (51.4%) still living in temporary shelter at the time of the survey, compared to 18.6% of households in Nuwakot (Table 6). A higher proportion of households in Nuwakot (53.6%) were living in a reconstructed (new) house on the same land as before the earthquake compared to Rasuwa (25.0%).

**Table 2 Age – household members**

		District				Total	
		Nuwakot		Rasuwa			
		N	%	N	%	N	%
<b>Age</b>	<b>&lt; 5 years</b>	368	9.2%	62	10.3%	430	9.4%
	<b>5-14 years</b>	845	21.1%	123	20.5%	968	21.1%
	<b>15-18 years</b>	328	8.2%	40	6.7%	368	8.0%
	<b>&gt; 18 years</b>	2456	61.4%	376	62.6%	2832	61.6%
<b>Total</b>		3997	100.0%	601	100.0%	4598	100.0%

N: number of persons † Column percent

**Table 3 Gender - household members**

		District				Total	
		Nuwakot		Rasuwa			
		N	%	N	%	N	%
<b>Gender</b>	<b>Male</b>	1807	45.2%	294	48.9%	2101	45.7%
	<b>Female</b>	2190	54.8%	307	51.1%	2497	54.3%
<b>Total</b>		3997	100.0%	601	100.0%	4598	100.0%

N: number of persons † Column percent

**Table 4 Caste/Ethnicity - household**

		District				Total	
		Nuwakot		Rasuwa			
		N	%	N	%	N	%
<b>Caste/ethnicity</b>	<b>Hill Dalit</b>	58	6.2%	2	1.4%	60	5.6%
	<b>Hill Janajati</b>	671	71.7%	116	80.6%	787	72.9%
	<b>Brahmin/Chettri</b>	177	18.9%	26	18.1%	203	18.8%
	<b>Thakuri/Dashnami</b>	30	3.2%	0	0.0%	30	2.8%
	<b>Total</b>	936	100.0%	144	100.0%	1080	100.0%

N: number of households † Column percent



**Table 5 Likelihood of household being in poverty**

District	Mean likelihood of household being in poverty (%)	Households	Std. Deviation	Min	Max
Nuwakot	10.8397	936	12.86727	.00	77.80
Rasuwa	8.1701	144	9.39778	.00	49.80
Total	10.4838	1080	12.48999	.00	77.80

**Table 6 Current residence**

	District				Total	
	Nuwakot		Rasuwa			
	N	%	N	%	N	%
Same house as before earthquake	234	25.0%	27	18.8%	261	24.2%
Reconstructed (new) house on same land	502	53.6%	36	25.0%	538	49.8%
Rented house on a different piece of land	8	0.9%	5	3.5%	13	1.2%
Institutional shelter	1	0.1%	0	0%	1	0.1%
Relative/friend's house	3	0.3%	1	0.7%	4	0.4%
Temporary shelter/tarpaulin	174	18.6%	74	51.4%	248	23.0%
Reconstructed house (new) on different land	14	1.5%	1	0.7%	15	1.4%
Total	936	100.0%	144	100.0%	1080	100.0%

N: number of households † Column percent

### 2.8.2 Household energy use by district

A significantly higher proportion of households in Rasuwa district used LPG as their main cooking fuel (38.9% vs. 10.9%) and a gas stove for cooking (43.1% vs. 11.3%) compared to Nuwakot. Open fires were used for cooking in 80% of households overall (n=864) and improved cookstoves in 4.3% of households (n=46). Wood was the main cooking fuel in 84.4% of households (n=910). Ninety % of households (n=967) cooked indoors, and in half these households (n=429) the kitchen was a separate room.

Electricity was widely available to provide lighting at night (91.3% of households), and solar home systems (photo-voltaic) provided another 7.3%. Most houses (68.7%) did not heat water for bathing, but 28.4% heated water on the cookstove. Most houses (93.5%) did not use an energy source to heat their homes, but 4.6% used wood in an open/traditional fire.



Figure 7 Open-fire cookstove (left) and improved cookstove (right)

Table 7 Main type of stove

	District				Total	
	Nuwakot		Rasuwa		N	%
	N	%	N	%		
Open-fire cookstove	788	84.2%	76	52.8%	864	80.0%
Kerosene stove	0	0.0%	0	0.0%	0	0.0%
Gas stove	106	11.3%	62	43.1%	168	15.6%
Improved cook stove	40	4.3%	6	4.2%	46	4.3%
No stove for cooking in the household	2	0.2%	0	0.0%	2	0.2%
<b>Total</b>	<b>936</b>	<b>100.0%</b>	<b>144</b>	<b>100.0%</b>	<b>1080</b>	<b>100.0%</b>

N: number of households † Column percent

Table 8 Main cooking fuel

	District				Total	
	Nuwakot		Rasuwa		N	%
	N	%	N	%		
LPG /cooking gas	102	10.9%	56	38.9%	158	14.7%
Biogas	4	0.4%	6	4.2%	10	0.9%
Kerosene	0	0.0%	0	0.0%	0	0.0%
Wood/firewood	828	88.7%	82	56.9%	910	84.4%
<b>Total</b>	<b>934</b>	<b>100.0%</b>	<b>144</b>	<b>100.0%</b>	<b>1078</b>	<b>100.0%</b>

N: number of households † Column percent

**Table 9 Main cooking location**

	District				Total	
	Nuwakot		Rasuwa		N	%
	N	%	N	%		
Inside the house	842	90.1%	125	86.8%	967	89.7%
In a separate building	20	2.1%	2	1.4%	22	2.0%
Outdoors	72	7.7%	17	11.8%	89	8.3%
<b>Total</b>	<b>934</b>	<b>100.0%</b>	<b>144</b>	<b>100.0%</b>	<b>1078</b>	<b>100.0%</b>

N: number of households † Column percent

**Table 10 Separate kitchen (if cook indoors)**

	District				Total	
	Nuwakot		Rasuwa		N	%
	N	%	N	%		
Yes	371	43.0%	58	45.7%	429	43.4%
No	491	57.0%	69	54.3%	560	56.6%
<b>Total</b>	<b>862</b>	<b>100.0%</b>	<b>127</b>	<b>100.0%</b>	<b>989</b>	<b>100.0%</b>

N: number of households † Column percent

**Table 11 Source of (artificial) light**

	District				Total	
	Nuwakot		Rasuwa		N	%
	N	%	N	%		
No lighting	1	0.1%	2	1.4%	3	0.3%
Electricity	850	90.8%	136	94.4%	986	91.3%
Solar home system	76	8.1%	3	2.1%	79	7.3%
Solar Lantern	1	0.1%	0	0.0%	1	0.1%
Battery flashlight, torch	3	0.3%	0	0.0%	3	0.3%
Kerosene Lamp	5	0.5%	2	1.4%	7	0.6%
Emergency light	0	0.0%	1	0.7%	1	0.1%
<b>Total</b>	<b>936</b>	<b>100.0</b>	<b>144</b>	<b>100.0</b>	<b>1080</b>	<b>100.0</b>

N: number of households † Column percent

**Table 12 Method of heating water (for bathing)**

	District				Total	
	Nuwakot		Rasuwa		N	%
	N	%	N	%		
Water not heated	683	73.0%	59	41.0%	742	68.7%
Electrical water heater	5	0.5%	10	6.9%	15	1.4%
LPG water heater (Geyser)	1	0.1%	0	0.0%	1	0.1%
Cookstove (used to heat water)	236	25.2%	71	49.3%	307	28.4%
Open fire (other stove mainly used for cooking)	8	0.9%	4	2.8%	12	1.1%
LPG gas stove	1	0.1%	0	0.0%	1	0.1%
Sunlight	2	0.2%	0	0.0%	2	0.2%
<b>Total</b>	<b>936</b>	<b>100.0%</b>	<b>144</b>	<b>100.0%</b>	<b>1080</b>	<b>100.0%</b>

N: number of households † Column percent

**Table 13 Fuel for home (space) heating**

	District				Total	
	Nuwakot		Rasuwa		N	%
	N	%	N	%		
No heating	877	93.7%	133	92.4%	1010	93.5%
Electric heater	5	0.5%	3	2.1%	8	0.7%
Charcoal	11	1.2%	1	0.7%	12	1.1%
Wood/firewood	43	4.6%	7	4.9%	50	4.6%
<b>Total</b>	<b>936</b>	<b>100.0%</b>	<b>144</b>	<b>100.0%</b>	<b>1080</b>	<b>100.0%</b>

N: number of households † Column percent

**Table 14 Type of space heater (if biomass fuel used)**

	District				Total	
	Nuwakot		Rasuwa		N	%
	N	%	N	%		
Traditional/open fire	54	100.0%	8	100.0%	62	100.0%
<b>Total</b>	<b>54</b>	<b>100.0%</b>	<b>8</b>	<b>100.0%</b>	<b>62</b>	<b>100.0%</b>

N: number of households † Column percent

### 2.8.3 Injury deaths at household level by district

Thirty one households out of 1,080 (approximately 3%) had at least one injury death due to the Gorkha earthquake. Four households (0.4%) had multiple earthquake fatalities. There was a higher proportion of households with earthquake fatalities in Rasuwa (7%) than in Nuwakot (2.2%).

In the last 5 years, 1.7% of households surveyed had at least one injury-related death that was not associated with the earthquake.

The likelihood of being in poverty was not significantly different between households with at least one injury death in the last 5 years (mean 9.825000%; SEM 1.802833%) and households without any injury deaths (mean 10.5144%; SEM 0.388958%).

**Table 15 Injury deaths per household (Earthquake)**

		District				Total	
		Nuwakot		Rasuwa		N	%
		N	%	N	%		
<b>Earthquake injury deaths per household</b>	<b>0</b>	915	97.8%	134	93.1%	1049	97.1%
	<b>1</b>	18	1.9%	9	6.3%	27	2.5%
	<b>2</b>	1	0.1%	0	0.0%	1	0.1%
	<b>3</b>	2	0.2%	1	0.7%	3	0.3%
<b>Total</b>		936	100.0%	144	100.0%	1080	100.0%

N: number of households † Column percent

**Table 16 Injury deaths per household in last 5 years (Non-earthquake)**

		District				Total	
		Nuwakot		Rasuwa		N	%
		N	%	N	%		
<b>Non-earthquake injury deaths per household</b>	<b>0</b>	923	98.6%	139	96.5%	1062	98.3%
	<b>1</b>	12	1.3%	5	3.5%	17	1.6%
	<b>2</b>	1	0.1%	0	0.0%	1	0.1%
<b>Total</b>		936	100.0%	144	100.0%	1080	100.0%

N: number of households † Column percent

#### 2.8.4 Non-fatal injuries at household level by district

Over ten percent (10.7%) of households (n=105) had at least one person injured as a result of the Gorkha earthquake (Table 17). In most households there was a single injured person (9.7%), but 11 households (1%) had multiple injured persons. Rasuwa district had a significantly higher proportion of households with injured persons (22.3%) compared to Nuwakot (8.9%).

Since the earthquake, 17.6% of households (n=190) have had at least one person injured (Table 18). In most households there was a single injured person (15.8%), but 19 households (1.8%) have had multiple injured persons. Rasuwa district had a significantly higher proportion of households with injuries (25.1%) compared to Nuwakot (16.5%).

The likelihood of being in poverty was significantly greater ( $p=0.010$ ) in households with at least one injured person in the last 18 months (mean 12.0918%; SEM 0.78083%) compared to households with no injuries (mean 9.8907%; SEM 0.43165%). This effect was observed both in Nuwakot and Rasuwa districts (Table 19).

**Table 17 Non-fatal injuries per household (Earthquake)**

		District				Total	
		Nuwakot		Rasuwa		N	%
		N	%	N	%		
Earthquake non-fatal injuries per household	0	852	91.0%	112	77.8%	964	89.3%
	1	79	8.4%	26	18.1%	105	9.7%
	2	2	0.2%	5	3.5%	7	0.6%
	3	2	0.2%	0	0.0%	2	0.2%
	5	1	0.1%	1	0.7%	2	0.2%
Total		936	100.0%	144	100.0%	1080	100.0%

N: number of households † Column percent

**Table 18 Non-fatal injuries per household in last 18 months (Non-earthquake)**

		District				Total	
		Nuwakot		Rasuwa		N	%
		N	%	N	%		
Non-earthquake non-fatal injuries per household	0	782	83.5%	108	75.0%	890	82.4%
	1	145	15.5%	26	18.1%	171	15.8%
	2	8	0.9%	9	6.3%	17	1.6%
	3	1	0.1%	1	0.7%	2	0.2%
Total		936	100.0%	144	100.0%	1080	100.0%

N: number of households † Column percent

**Table 19 Likelihood of a household being in poverty by injury status (non-fatal) and district**

Injury Status	Name of District	Mean	N	Std. Deviation
No injuries	Nuwakot	10.2182	707	12.38056
	Rasuwa	7.0671	82	9.22770
	Total	9.8907	789	12.12464
At least one injured person	Nuwakot	12.7585	229	14.12261
	Rasuwa	9.6290	62	9.49598
	Total	12.0918	291	13.32002
Total	Nuwakot	10.8397	936	12.86727
	Rasuwa	8.1701	144	9.39778
	Total	10.4838	1080	12.48999

N: number of households

### 2.8.5 Injury-related deaths – individual level

In the surveyed sample there were 38 earthquake injury deaths and 19 non-earthquake injury deaths (Table 20). Almost all injury deaths were in adults > 18 years (94.7% of earthquake deaths; 100% of non-earthquake deaths). In adults the rate of fatal earthquake

injuries was 12.7 per 1,000 (95% CI (8.6-16.8)). The overall rate of fatal earthquake injuries was 8.3 per 1,000 (95% CI 5.6-10.9) and the annual incidence of fatal injuries (non-earthquake) was 4.1 per 1,000 (Table 21).

All earthquake deaths were caused by 'struck/hit by person or object' (92.1%) or 'fall' (7.9%) (Table 22). Non-earthquake deaths had a wide variety of causes, with falls (36.8%) and traffic accidents (15.8%) the two most common causes.

Nearly 90% of persons who died as a result of the earthquake (n=33) died at the place where the injury occurred, with a further 7.9% (n=3) of deaths occurring at a health facility (Table 23). In the case of non-earthquake injury deaths, 52.6% (n=10) died at the place where the injury occurred, a further 26.3% (n=5) at the health facility to which they were taken, and 15.8% (n=3) died at home.

Of the 19 non-earthquake deaths, 18 were reported as accidental, and one was reported as intent 'unknown'. Earthquake deaths were all considered accidental.

**Table 20 Number of injury deaths by age group**

		Death due to earthquakes in April-May 2015				Total	
		Yes		No			
		N	%	N	%	N	%
Age	0-4 years	0	0.0%	0	0.0%	0	0.0%
	5-14 years	1	2.6%	0	0.0%	1	1.8%
	15-18 years	1	2.6%	0	0.0%	1	1.8%
	> 18 years	36	94.7%	19	100.0%	55	96.5%
Total		38	100.0%	19	100.0%	57	100.0%

N: number of individuals † Column percent

**Table 21 Injury fatality rates**

			Earthquake fatalities		Non-earthquake fatalities	
			N	Rate of fatal injury per 1000 (95% CI)	N (Recall period 5 years)	Annual incidence of fatal injury per 1000 (95% CI) †
Age	< 5 years	430	0	0.0	0	0.0
	5-14 years	968	1	1.0	0	0.0
	15-18 years	368	1	2.7	0	0.0
	> 18 years	2832	36	12.7 (8.6-16.8)	19	6.7
Total		4598	38	8.3 (5.6-10.9)	19	4.1

† Adjusted 12-month

**Table 22 Number of deaths by cause of injury**

	Death due to earthquakes in April-May 2015				Total	
	Yes		No			
	N	%	N	%	N	%
Traffic accident	0	0.0%	3	15.8%	3	5.3%
Fall	3	7.9%	7	36.8%	10	17.5%
Struck/hit by person or object	35	92.1%	2	10.5%	37	64.9%
Fire, flames or heat	0	0.0%	1	5.3%	1	1.8%
Drowning	0	0.0%	2	10.5%	2	3.5%
Poisoning	0	0.0%	1	5.3%	1	1.8%
Electrical shock	0	0.0%	2	10.5%	2	3.5%
Playing around (using rope)	0	0.0%	1	5.3%	1	1.8%
<b>Total</b>	<b>38</b>	<b>100.0%</b>	<b>19</b>	<b>100.0%</b>	<b>57</b>	<b>100.0%</b>

N: number of individuals † Column percent

**Table 23 Place of death**

	Death due to earthquakes in April-May 2015				Total	
	Yes		No			
	N	%	N	%	N	%
At the place where the injury occurred	33	86.8%	10	52.6%	43	75.4%
At a health facility (e.g. hospital, clinic, health centre)	3	7.9%	5	26.3%	8	14.0%
At home (if injury didn't occur at home)	1	2.6%	3	15.8%	4	7.0%
On the way to home	0	0.0%	1	5.3%	1	1.8%
Friends home	1	2.6%	0	0.0%	1	1.8%
<b>Total</b>	<b>38</b>	<b>100.0%</b>	<b>19</b>	<b>100.0%</b>	<b>57</b>	<b>100.0%</b>

N: number of individuals † Column percent



**Table 24 Time from injury to death**

	Death due to earthquakes in April-May 2015				Total	
	Yes		No			
	N	%	N	%	N	%
Immediately	27	71.1%	5	26.3%	32	56.1%
Less than 1 hour after the injury	3	7.9%	2	10.5%	5	8.8%
Between 1 and 6 hours after the injury	1	2.6%	2	10.5%	3	5.3%
More than 6 hours but less than 12 hours after the injury	0	0.0%	1	5.3%	1	1.8%
Between 12 & 24 hours after the injury	0	0.0%	2	10.5%	2	3.5%
More than 1 day but less than 1 week after the injury	2	5.3%	1	5.3%	3	5.3%
More than 1 week after the injury	2	5.3%	3	15.8%	5	8.8%
Don't know	3	7.9%	3	15.8%	6	10.5%
Total	38	100.0%	19	100.0%	57	100.0%

N: number of individuals † Column percent

### 2.8.6 Non-fatal injuries (all causes) - individual level

In the surveyed sample there were 135 earthquake injuries (Table 25) and 211 non-earthquake injuries (Table 27). The respondent for the injury survey was the victim in 146 cases and a proxy in 200 cases.

The overall rate of earthquake non-fatal injuries was 29.4 per 1,000 (95% CI 24.5-34.2), with the highest rates in adults > 18 years (34.6 per 1,000 [95% CI 27.9-41.3]) and in children 5-14 years (31.0 per 1,000 [95% CI 20.1-41.9]) (Table 26). Children 5-14 years comprised 22.2% of all earthquake non-fatal injuries (Table 25). 'Fractures', 'sprains/dislocations' or 'cuts, bites or other open wounds' comprised 71.9% of all earthquake injuries. Another 25.9% were 'bruises/superficial injuries', 'head injuries/concussion' or 'internal injuries' (Table 29). Over 90% of the injuries were caused by 'being struck/hit by person or object' (75.6%) or 'falls' (20.7%) (Table 30). The Gorkha earthquake took place on a Saturday, and most injuries (87.4%) occurred in the home or on the farm on when people were having leisure time (45.2%), eating or drinking (16.3%), doing household chores (12.6%) or sleeping (16.3%) (Table 38).

The annual incidence of non-fatal injuries unrelated to the earthquake was 30.6 per 1,000 (95% CI 28.0-33.1), with the highest rates in children 5-14 years (32.3 per 1,000 [95% CI 21.2-43.5]) and adults > 18 years (32.2 per 1,000 [95% CI 25.7-38.7]) (Table 28). Children 5-14 years comprised 22.3% of those with non-fatal injuries (Table 27). 'Fractures',

‘sprains/dislocations’ or ‘cuts, bites or other open wounds’ comprised 86.2% of all non-earthquake injuries and a further 7.1% were burns (Table 29). Most injuries were caused by ‘falls’ (67.8%) followed by ‘being struck/hit by person or object’ (12.3%) (Table 31), with annual incidence rates of 20.7 per 1,000 (95% CI 16.6-24.8) and 3.7 per 1,000 (95% CI 2.0-5.5) respectively (Table 32). ‘Fire/flammes/or heat’ and ‘road traffic accidents’ were the next most common causes of non-fatal injuries unrelated to the earthquake, both with a rate of 2.5 per 1,000 (95% CI 1.0-3.9). Most injuries (79.1%) occurred in the home, street, or on the farm when people were engaged in household chores (unpaid work) (43.1%), sports (15.2%), travelling (11.8%) or having leisure time (9.0%) (Table 37). Two of the 211 non-earthquake injuries (0.9%) were reported as intentional (assaults); both these cases were males.

**Table 25 Earthquake injuries by age-group and gender**

		Male		Female		Total	
		N	%	N	%	N	%
Age	< 5 years	2	2.9%	1	1.5%	3	2.2%
	5-14 years	18	26.1%	12	18.2%	30	22.2%
	15-18 years	1	1.4%	3	4.5%	4	3.0%
	> 18 years	48	69.6%	50	75.8%	98	72.6%
Total		69	100.0%	66	100.0%	135	100.0%

N: number of individuals † Column percent (ns)

**Table 26 Injury rates by age-group (Earthquake)**

	Total surveyed population	N	Non-fatal injuries per 1000 (95% CI)
< 5 years	430	3	7.0
5-14 years	968	30	31.0 (20.1-41.9)
15-18 years	368	4	10.9
> 18 years	2832	98	34.6 (27.9-41.3)
Total	4598	135	29.4 (24.5-34.2)

N: number of individuals † Column percent

**Table 27 Non-earthquake injuries by age-group and gender**

		Male		Female		Total	
		N	%	N	%	N	%
Age	< 5 years	8	7.0%	8	8.2%	16	7.6%
	5-14 years	29	25.4%	18	18.6%	47	22.3%
	15-18 years	7	6.1%	4	4.1%	11	5.2%
	> 18 years	70	61.4%	67	69.1%	137	64.9%
Total		114	100.0%	97	100.0%	211	100.0%

N: number of individuals † Column percent (ns)

**Table 28 Injury rates by age-group (Non-earthquake)**

	Total surveyed population	N (18-month recall period)	Annual incidence injuries per 1000 <sup>†</sup> (95% CI) <sup>#</sup>
<b>Age</b>			
< 5 years	430	16	24.8 (10.1-39.5)
5-14 years	968	47	32.3 (21.2-43.5)
15-18 years	368	11	19.9
> 18 years	2832	137	32.2 (25.7-38.7)
<b>Total</b>	4598	211	30.6 (28.0-33.1)

<sup>†</sup> Adjusted 12-month <sup>#</sup> When sample size and probability are sufficient

**Table 29 Nature of physical injuries**

	Death due to earthquakes in April-May 2015				Total	
	Yes		No		N	%
	N	%	N	%		
Broken bone	20	11.2%	58	24.3%	78	18.7%
Sprain/dislocation	53	29.8%	86	36.0%	139	33.3%
Cut, bite or other open wound	55	30.9%	62	25.9%	117	28.1%
Bruise or superficial injury	19	10.7%	9	3.8%	28	6.7%
Burn	1	0.6%	17	7.1%	18	4.3%
Poisoning	0	0.0%	0	0.0%	0	0.0%
Concussion/head injury	16	9.0%	3	1.3%	19	4.6%
Internal injury/internal organ injury	11	6.2%	4	1.7%	15	3.6%
Dental injury	1	0.6%	0	0.0%	1	0.2%
Suffocation	2	1.1%	0	0.0%	2	0.5%
<b>Total</b>	178	100.0%	239	100.0%	417	100.0%

N: number of injuries (multiple injuries per person possible) <sup>†</sup> Column percent

**Table 30 Mechanism of injury (Earthquake)**

	Male		Female		Total	
	N	%	N	%	N	%
Traffic accident	1	1.4%	0	0.0%	1	0.7%
Fall	16	23.2%	12	18.2%	28	20.7%
Struck/hit by person or object	49	71.0%	53	80.3%	102	75.6%
Fire, flames or heat	1	1.4%	0	0.0%	1	0.7%
Entered foreign bodies	2	2.9%	1	1.5%	3	2.2%
<b>Total</b>	69	100.0%	66	100.0%	135	100.0%

N: number of individuals <sup>†</sup> Column percent

**Table 31 Mechanism of injury (Non-earthquake)**

	Male		Female		Total	
	N	%	N	%	N	%
Traffic accident	12	10.5%	5	5.2%	17	8.1%
Fall	72	63.2%	71	73.2%	143	67.8%
Struck/hit by person or object	17	14.9%	9	9.3%	26	12.3%
Stab	1	0.9%	0	0.0%	1	0.5%
Fire, flames or heat	9	7.9%	8	8.2%	17	8.1%
Poisoning	1	0.9%	0	0.0%	1	0.5%
Animal bite/attack	1	0.9%	4	4.1%	5	2.4%
Entered foreign bodies	1	0.9%	0	0.0%	1	0.5%
<b>Total</b>	<b>114</b>	<b>100.0%</b>	<b>97</b>	<b>100.0%</b>	<b>211</b>	<b>100.0%</b>

N: number of individuals † Column percent

**Table 32 Rates of injury by mechanism (Non-earthquake)**

	N (18-month recall period)	Annual incidence injuries per 1000 † (95% CI) #
Traffic accident	17	2.5 (1.0-3.9)
Fall	143	20.7 (16.6-24.8)
Struck/hit by person or object	26	3.7 (2.0-5.5)
Stab	1	0.1
Fire, flames or heat	17	2.5 (1.0-3.9)
Poisoning	1	0.1
Animal bite/attack	5	0.7
Entered foreign bodies	1	0.1

Total surveyed population = 4,598 † Adjusted 12-month # When sample size and probability are sufficient

**Table 33 Injured person's occupation (Earthquake)**

	Male		Female		Total	
	N	%	N	%	N	%
Paid wages on daily wages or contract/piece rate in agriculture	2	2.9%	3	4.5%	5	3.7%
Paid wages on daily wages or contract/piece rate in non-agriculture	12	17.4%	2	3.0%	14	10.4%
Self-employed in agriculture	17	24.6%	16	24.2%	33	24.4%
Self-employed in non-agriculture	4	5.8%	4	6.1%	8	5.9%
Paid wages on long-term basis in agriculture	1	1.4%	0	0.0%	1	0.7%
Student	19	27.5%	14	21.2%	33	24.4%
Home duties/working in the home	1	1.4%	17	25.8%	18	13.3%
Non-paid worker/volunteer	0	0.0%	1	1.5%	1	0.7%
Unemployed (able to work)	3	4.3%	2	3.0%	5	3.7%
Unemployed (unable to work)	8	11.6%	7	10.6%	15	11.1%
Not applicable (Baby)	2	2.9%	0	0.0%	2	1.5%
<b>Total</b>	<b>69</b>	<b>100.0%</b>	<b>66</b>	<b>100.0%</b>	<b>135</b>	<b>100.0%</b>

N: number of individuals † Column percent

**Table 34 Injured person's occupation (Non-earthquake)**

	Male		Female		Total	
	N	%	N	%	N	%
Paid wages on daily wages or contract/piece rate in agriculture	4	3.5%	1	1.0%	5	2.4%
Paid wages on daily wages or contract/piece rate in non-agriculture	18	15.8%	3	3.1%	21	10.0%
Self-employed in agriculture	23	20.2%	19	19.6%	42	19.9%
Self-employed in non-agriculture	6	5.3%	5	5.2%	11	5.2%
Paid wages on long-term basis in agriculture	3	2.6%	0	0.0%	3	1.4%
Paid wages on long-term basis in non-agriculture	6	5.3%	0	0.0%	6	2.8%
Student	41	36.0%	27	27.8%	68	32.2%
Home duties/working in the home	0	0.0%	26	26.8%	26	12.3%
Non-paid worker/volunteer	0	0.0%	1	1.0%	1	0.5%
Retired	1	0.9%	1	1.0%	2	0.9%
Unemployed (able to work)	3	2.6%	1	1.0%	4	1.9%
Unemployed (unable to work)	6	5.3%	11	11.3%	17	8.1%
Not applicable (Baby)	3	2.6%	2	2.1%	5	2.4%
Total	114	100.0%	97	100.0%	211	100.0%

N: number of individuals † Column percent

**Table 35 Time of injury (Non-earthquake)**

	Male		Female		Total	
	N	%	N	%	N	%
Morning (05:00-11:00)	32	28.1%	33	34.0%	65	30.8%
Middle of the day (11:00-1300)	24	21.1%	23	23.7%	47	22.3%
Afternoon (13:00-17:00)	37	32.5%	25	25.8%	62	29.4%
Evening (17:00-19:00)	16	14.0%	10	10.3%	26	12.3%
Night (19:00-05:00)	5	4.4%	5	5.2%	10	4.7%
Don't know	0	0.0%	1	1.0%	1	0.5%
Total	114	100.0%	97	100.0%	211	100.0%

N: number of individuals † Column percent

**Table 36 Place of injury (Earthquake)**

	Male		Female		Total	
	N	%	N	%	N	%
Home	50	72.5%	56	84.8%	106	78.5%
Street/highway	1	1.4%	0	0.0%	1	0.7%
Residential institution			1	1.5%	1	0.7%
Industrial or construction	2	2.9%	0	0.0%	2	1.5%
Farm (excluding home)	6	8.7%	6	9.1%	12	8.9%
Countryside	3	4.3%	3	4.5%	6	4.4%
Shed	3	4.3%	0	0.0%	3	2.2%
On the way to trekking	2	2.9%	0	0.0%	2	1.5%
Neighbour/Relative home	2	2.9%	0	0.0%	2	1.5%
<b>Total</b>	<b>69</b>	<b>100.0%</b>	<b>66</b>	<b>100.0%</b>	<b>135</b>	<b>100.0%</b>

N: number of individuals † Column percent

**Table 37 Place of injury (Non-earthquake)**

	Male		Female		Total	
	N	%	N	%	N	%
Home	28	24.6%	38	39.2%	66	31.3%
School	6	5.3%	3	3.1%	9	4.3%
Street/highway	33	28.9%	19	19.6%	52	24.6%
Residential institution	2	1.8%	1	1.0%	3	1.4%
Sports and athletic area	3	2.6%	5	5.2%	8	3.8%
Industrial or construction	3	2.6%	0	0.0%	3	1.4%
Farm (excluding home)	22	19.3%	17	17.5%	39	18.5%
Commercial area (shop, store, hotel, bar, office)	2	1.8%	0	0.0%	2	0.9%
Countryside	14	12.3%	10	10.3%	24	11.4%
Religious place	0	0.0%	2	2.1%	2	0.9%
On the way to trekking	1	0.9%	1	1.0%	2	0.9%
Water tap	0	0.0%	1	1.0%	1	0.5%
<b>Total</b>	<b>114</b>	<b>100.0%</b>	<b>97</b>	<b>100.0%</b>	<b>211</b>	<b>100.0%</b>

N: number of individuals † Column percent

**Table 38 Activity at time of injury (Earthquake)**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Paid work (including travel to and from work)</b>	6	8.7%	0	0.0%	6	4.4%
<b>Unpaid work (including household-related chores and travel to and from unpaid work)</b>	9	13.0%	8	12.1%	17	12.6%
<b>Sports</b>	2	2.9%	0	0.0%	2	1.5%
<b>Leisure /Unspecified activities (e.g. hanging around, doing nothing)</b>	26	37.7%	35	53.0%	61	45.2%
<b>Sleeping</b>	9	13.0%	8	12.1%	17	12.6%
<b>Other vital activity (i.e. eating, drinking)</b>	8	11.6%	14	21.2%	22	16.3%
<b>Travelling</b>	3	4.3%	0	0.0%	3	2.2%
<b>Harvesting/Farming/ Cattle herding/ Cattle feeding</b>	3	4.3%	0	0.0%	3	2.2%
<b>Rescuing people</b>	3	4.3%	1	1.5%	4	3.0%
<b>Total</b>	69	100.0%	66	100.0%	135	100.0%

N: number of individuals † Column percent



**Table 39 Activity at time of injury (Non-earthquake)**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Paid work (including travel to and from work)</b>	13	11.4%	1	1.0%	14	6.6%
<b>Unpaid work (including household-related chores and travel to and from unpaid work)</b>	47	41.2%	44	45.4%	91	43.1%
<b>Education</b>	2	1.8%	3	3.1%	5	2.4%
<b>Sports</b>	21	18.4%	11	11.3%	32	15.2%
<b>Leisure /Unspecified activities (e.g. hanging around, doing nothing)</b>	9	7.9%	10	10.3%	19	9.0%
<b>Other vital activity (i.e. eating, drinking)</b>	3	2.6%	6	6.2%	9	4.3%
<b>Travelling</b>	12	10.5%	13	13.4%	25	11.8%
<b>Playing around</b>	2	1.8%	3	3.1%	5	2.4%
<b>Harvesting/Farming/ Cattle herding/ Cattle feeding</b>	4	3.5%	3	3.1%	7	3.3%
<b>House maintenance related activities</b>	1	0.9%	1	1.0%	2	0.9%
<b>Learning driving</b>	0	0.0%	1	1.0%	1	0.5%
<b>Climbing up/down stair</b>	0	0.0%	1	1.0%	1	0.5%
<b>Total</b>	114	100.0%	97	100.0%	211	100.0%

N: number of individuals † Column percent

**Table 40 Alcohol in last 6 hours (Earthquake)**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Yes</b>	4	5.8%			4	3.0%
<b>No</b>	65	94.2%	66	100.0%	131	97.0%
<b>Total</b>	69	100.0%	66	100.0%	135	100.0%

N: number of individuals † Column percent

**Table 41 Alcohol in last 6 hours (Non-earthquake)**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Yes</b>	6	5.3%	3	3.1%	9	4.3%
<b>No</b>	108	94.7%	94	96.9%	202	95.7%
<b>Total</b>	114	100.0%	97	100.0%	211	100.0%

N: number of individuals † Column percent

### 2.8.7 Injury treatment (all causes)

Most injured persons (61.6%) received some kind of first aid at the scene (Table 41), which was given almost entirely by bystanders, friends and family (Table 42). Medical care from a health facility was sought for 248 injured persons (71.7%) (Table 44) and a wide variety of modes of transport were used to get the person to the facility. The majority of injured persons got to the facility on foot (31%), by public transport (30.2%) or by bicycle (9.7%). Another 14.6% were carried by stretcher, doko basket, or by people (Table 45). Approximately 90% of injured persons arrived at the facility within 6 hours, but 7.7% (n=19) took longer than 24 hours (Table 46). 27.0% were treated at a government hospital, 27.8% at a health post and 41.5% at a private hospital or clinic (Table 47). Just over a quarter of injured persons transported to a health facility were admitted to the facility for treatment (26.6%); others were treated at outpatients (Table 48).

Length of hospital stay for individuals with earthquake injuries (median 15.0 days; IQR: 5.0-40.4 days) was not significantly greater than for individuals with non-earthquake injuries (median 9.0 days; IQR 4.0-23.0). Length of hospital stay was not significantly different between males (median 8.5; IQR 4.0-40.2) and females (median 11.0; IQR 4.0-30.4).

**Table 42 First aid at scene**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Yes</b>	114	62.3%	99	60.7%	213	61.6%
<b>No</b>	66	36.1%	64	39.3%	130	37.6%
<b>Don't know/Can't remember</b>	3	1.6%	0	0.0%	3	0.9%
<b>Total</b>	183	100.0%	163	100.0%	346	100.0%

N: number of individuals † Column percent

**Table 43 Person who provided first aid**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Bystander</b>	41	29.3%	35	29.4%	76	29.3%
<b>Friend/family</b>	93	66.4%	78	65.6%	171	66.0%
<b>Teacher</b>	0	0.00%	3	2.5%	3	1.2%
<b>Police</b>	1	0.7%	1	0.8%	2	0.8%
<b>Ambulance personnel/paramedics</b>	3	2.1%	1	0.8%	4	1.5%
<b>Self</b>	1	0.7%	0	0.00%	1	0.4%
<b>Female community health volunteer</b>	1	0.7%	0	0.00%	1	0.4%
<b>Neighbour</b>	0	0.0%	1	0.8%	1	0.4%
<b>Total</b>	140	100.0%	119	100.0%	259	100.0%

N: number of persons who offered first aid (may be more than one per injured person) † Column percent

**Table 44 Medical care sought outside the home**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Yes</b>	137	74.9%	111	68.1%	248	71.7%
<b>No</b>	46	25.1%	52	31.9%	98	28.3%
<b>Total</b>	183	100.0%	163	100.0%	346	100.0%

N: number of individuals † Column percent

**Table 45 Transport to health facility**

	Male		Female		Total	
	N	%	N	%	N	%
By foot	46	33.6%	31	27.9%	77	31.0%
By taxi	2	1.5%	0	0.0%	2	0.8%
By public transport	41	29.9%	34	30.6%	75	30.2%
By ambulance	14	10.2%	13	11.7%	27	10.9%
By bicycle /bike	10	7.3%	14	12.6%	24	9.7%
By helicopter/ aeroplane	0	0.0%	1	0.9%	1	0.4%
Stretcher/doko (traditional basket)	9	6.6%	10	9.0%	19	7.7%
By van of NGOs	0	0.0%	1	0.9%	1	0.4%
By government vehicle	0	0.0%	1	0.9%	1	0.4%
Company vehicle	3	2.2%	0	0.0%	3	1.2%
Carried by people	11	8.0%	6	5.4%	17	6.9%
Don't know	1	0.7%	0	0.0%	1	0.4%
<b>Total</b>	<b>137</b>	<b>100.0%</b>	<b>111</b>	<b>100.0%</b>	<b>248</b>	<b>100.0%</b>

N: number of individuals † Column percent

**Table 46 Transport time**

	Male		Female		Total	
	N	%	N	%	N	%
Less than 1 hour	52	38.0%	31	27.9%	83	33.5%
1–2 hours	40	29.2%	35	31.5%	75	30.2%
3–6 hours	33	24.1%	30	27.0%	63	25.4%
7–9 hours	2	1.5%	2	1.8%	4	1.6%
13–24 hours	3	2.2%	1	0.9%	4	1.6%
More than 24 hours	7	5.1%	12	10.8%	19	7.7%
<b>Total</b>	<b>137</b>	<b>100.0%</b>	<b>111</b>	<b>100.0%</b>	<b>248</b>	<b>100.0%</b>

N: number of individuals † Column percent

**Table 47 Place of medical care**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Govt. Hospital</b>	40	29.2%	27	24.3%	67	27.0%
<b>Health post</b>	37	27.0%	32	28.8%	69	27.8%
<b>PHC outreach</b>	2	1.5%	1	0.9%	3	1.2%
<b>Mobile clinic</b>	2	1.5%	1	0.9%	3	1.2%
<b>Private hospital/clinic/nursing home</b>	53	38.7%	50	45.0%	103	41.5%
<b>Pharmacy</b>	2	1.5%	0	0.0%	2	0.8%
<b>Traditional health centre</b>	1	0.7%	0	0.0%	1	0.4%
<b>Total</b>	137	100.0%	111	100.0%	248	100.0%

N: number of individuals † Column percent

**Table 48 Admission to hospital/ health facility**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Yes</b>	32	23.4%	34	30.6%	66	26.6%
<b>No</b>	105	76.6%	77	69.4%	182	73.4%
<b>Total</b>	137	100.0%	111	100.0%	248	100.0%

N: number of individuals † Column percent

### 2.8.8 Burn injuries

There were 18 burn injuries reported in the survey, giving an overall rate of burn injury in the population of 2.6 per 1,000 (95% CI 1.1-4.1) (Table 50). In children 14 years and under the burn injury rate was 3.8 per 1,000. The sample size was too small to provide a 95% confidence interval for age sub-groups. Approximately half of all burns were in children 18 years and younger. Gender effects were observed in relation to occupation of the injured person, with higher proportions of burns in male (school-age) students and in females undertaking home duties (Table 51). The morning was a very common time for burn injury (Table 52) and the majority of burns occurred in the home (83.3%) (Table 52), 80% of these in the kitchen (Table 53).

The most common activity associated with burn injury (44%) was unpaid work (including household chores) (Table 54), with 50% of burn injuries directly related to cooking (Table 55). Scalds were the most common primary cause of burn injury (55.6%) (Table 56) and all flame burns (except one caused by gas) were caused by open fires (Table 57). For cooking and

space heating burns, the base of the stove was within reach of children in almost all cases (less than 0.9m from ground) (Table 58). All burn injuries were reported to be accidental. Accidental movement was involved in causing two thirds of the burns (e.g. fall, spill, clothing or hair catching fire, getting too close to fire or hot object) (Table 59).

The consumption of any alcohol within 6 hours of the burn injury was not reported for any cases. One person had a medical reason contributing to the burn injury - a pre-existing physical disability.

**Table 49 Age of burn-injured person**

Age (years)	Male		Female		Total	
	N	%	N	%	N	%
<5	3	30.0%	2	25.0%	5	27.8%
5-14	2	20.0%	1	12.5%	3	16.7%
15-18	1	10.0%	0	0%	1	5.6%
>18	4	40.0%	5	62.5%	9	50.0%
<b>Total</b>	<b>10</b>	<b>100.0%</b>	<b>8</b>	<b>100.0%</b>	<b>18</b>	<b>100.0%</b>

N: number of individuals † Column percent

**Table 50 Rates of burn injury by age**

Age (years)	Total surveyed population	N (18 month recall period)	Annual incidence of burn injury per 1000 <sup>†</sup> (95% CI) <sup>#</sup>
<5	430	5	7.8
5-14	968	3	2.1
15-18	368	1	1.8
>18	2832	9	2.1
<b>Total</b>	<b>4598</b>	<b>18</b>	<b>2.6 (1.1-4.1)</b>

† Adjusted 12-month      <sup>#</sup> When sample size and probability are sufficient

**Table 51 Occupation of burn-injured person**

	Male		Female		Total	
	N	%	N	%	N	%
Paid wages on daily wages or contract/piece rate in agriculture	1	10.0%	0	0.0%	1	5.6%
Self-employed in agriculture	0	0.0%	2	25.0%	2	11.1%
Self-employed in non-agriculture	1	10.0%	0	0.0%	1	5.6%
Student	5	50.0%	1	12.5%	6	33.3%
Home duties/working in the home	1	10.0%	3	37.5%	4	22.2%
Unemployed (unable to work)	1	10.0%	1	12.5%	2	11.1%
Not applicable (Baby)	1	10.0%	1	12.5%	2	11.1%
<b>Total</b>	<b>10</b>	<b>100.0%</b>	<b>8</b>	<b>100.0%</b>	<b>18</b>	<b>100.0%</b>

N: number of individuals † Column percent

**Table 52 Time of burn injury**

	Male		Female		Total	
	N	%	N	%	N	%
Morning (05:00-11:00)	4	40.0%	6	75.0%	10	55.6%
Middle of the day (11:00-1300)	2	20.0%	0	0.0%	2	11.1%
Afternoon (13:00-17:00)	2	20.0%	0	0.0%	2	11.1%
Evening (17:00-19:00)	1	10.0%	2	25.0%	3	16.7%
Night (19:00-05:00)	1	10.0%	0	0.0%	1	5.6%
<b>Total</b>	<b>10</b>	<b>100.0%</b>	<b>8</b>	<b>100.0%</b>	<b>18</b>	<b>100.0%</b>

N: number of individuals † Column percent

**Table 53 Place of burn injury**

	Male		Female		Total	
	N	%	N	%	N	%
Home	7	70.0%	8	100.0%	15	83.3%
School	1	10.0%	0	0%	1	5.6%
Farm (excluding home)	1	10.0%	0	0%	1	5.6%
Commercial area (shop, store, hotel, bar, office)	1	10.0%	0	0%	1	5.6%
<b>Total</b>	<b>10</b>	<b>100.0%</b>	<b>8</b>	<b>100.0%</b>	<b>18</b>	<b>100.0%</b>

N: number of individuals † Column percent

**Table 54 Activity at time of burn injury**

	Male		Female		Total	
	N	%	N	%	N	%
Unpaid work (including household-related chores and travel to and from unpaid work)	3	30.0%	5	62.5%	8	44.4%
Sports	2	20.0%	1	12.5%	3	16.7%
Leisure /Unspecified activities (e.g. hanging around, doing nothing)	1	10.0%	0	0.0%	1	5.6%
Other vital activity (i.e. eating, drinking)	3	30.0%	1	12.5%	4	22.2%
Playing	1	10.0%	1	12.5%	2	11.1%
<b>Total</b>	<b>10</b>	<b>100.0%</b>	<b>8</b>	<b>100.0%</b>	<b>18</b>	<b>100.0%</b>

N: number of individuals † Column percent

**Table 55 Main event contributing to burn injury**

	Male		Female		Total	
	N	%	N	%	N	%
Cooking	4	40.0%	5	62.5%	9	50.0%
Heating/warming of rooms or body	1	10.0%	1	12.5%	2	11.1%
Alcohol production	1	10.0%	0	0.0%	1	5.6%
Burn by hot food or liquid item	2	20.0%	2	25.0%	4	22.2%
Playing around fire	2	20.0%	0	0.0%	2	11.1%
<b>Total</b>	<b>10</b>	<b>100.0%</b>	<b>8</b>	<b>100.0%</b>	<b>18</b>	<b>100.0%</b>

N: number of individuals † Column percent

**Table 56 Primary cause of burn**

	Male		Female		Total	
	N	%	N	%	N	%
Flames / fire	5	50.0%	2	25.0%	7	38.9%
Hot liquid, steam or other gas	5	50.0%	5	62.5%	10	55.6%
Contact with a hot object or solid substance (e.g. cookstove, pot, engine)	0	0.0%	1	12.5%	1	5.6%
<b>Total</b>	<b>10</b>	<b>100.0%</b>	<b>8</b>	<b>100.0%</b>	<b>18</b>	<b>100.0%</b>

N: number of individuals † Column percent



**Table 57 Fuel source (flame burns)**

	Male		Female		Total	
	N	%	N	%	N	%
Wood, dung, leaves, rubbish, straw, thatch	4	80.0%	2	100.0%	6	85.7%
Candle	1	20.0%	0	0.0%	1	14.3%
<b>Total</b>	5	100.0%	2	100.0%	7	100.0%

N: number of individuals † Column percent

**Table 58 Stove height – base of stove (cooking and space heating burns)**

	Male		Female		Total	
	N	%	N	%	N	%
At ground level	2	40.0%	3	50.0%	5	45.5%
Less than 0.9m from the ground	2	40.0%	2	33.3%	4	36.4%
At least 0.9m from the ground	1	20.0%	0	0.0%	1	9.1%
Don't know	0	0.0%	1	16.7%	1	9.1%
<b>Total</b>	5	100.0%	6	100.0%	11	100.0%

N: number of individuals † Column percent

**Table 59 Accidental movement involved in the burn event**

	Male		Female		Total	
	N	%	N	%	N	%
Yes	8	80.0%	4	50.0%	12	66.7%
No	2	20.0%	4	50.0%	6	33.3%
<b>Total</b>	10	100.0%	8	100.0%	18	100.0%

N: number of individuals † Column percent

**Table 60 Equipment problem contributed to the burn event**

	Male		Female		Total	
	N	%	N	%	N	%
Yes (Specify)	0	0.0%	1	12.5%	1	5.6%
No	10	100.0%	7	87.5%	17	94.4%
<b>Total</b>	10	100.0%	8	100.0%	18	100.0%

N: number of individuals † Column percent

**Table 61 Unsafe activity being undertaken at time of burn event**

	Male		Female		Total	
	N	%	N	%	N	%
Yes (Specify)	2	20.0%	2	25.0%	4	22.2%
No	8	80.0%	6	75.0%	14	77.8%
<b>Total</b>	10	100.0%	8	100.0%	18	100.0%

N: number of individuals † Column percent

**Table 62 Ignition of clothing**

	Male		Female		Total	
	N	%	N	%	N	%
<b>No</b>	10	100.0%	8	100.0%	18	100.0%
<b>Total</b>	10	100.0%	8	100.0%	18	100.0%

N: number of individuals † Column percent

**Table 63 Medical reason contributed to the burn injury**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Yes</b>	0	0.0%	1	12.5%	1	5.6%
<b>No</b>	10	100.0%	7	87.5%	17	94.4%
<b>Total</b>	10	100.0%	8	100.0%	18	100.0%

N: number of individuals † Column percent

**Table 64 Location in home (if injured at home)**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Kitchen</b>	4	57.1%	8	100.0%	12	80.0%
<b>Living rooms/sleeping places</b>	1	14.3%	0	0.0%	1	6.7%
<b>Yard (or area outside house)</b>	2	28.6%	0	0.0%	2	13.3%
<b>Total</b>	7	100.0%	8	100.0%	15	100.0%

N: number of individuals † Column percent

### 2.8.9 Burn injury treatment

Half of the people with burn injury had cool water applied to the burn (Table 65) but only 3 people (16.7%) had water applied for at least 15 minutes (Table 66). The majority (77.8%) had another home-based first aid treatment applied (details available on request) (Table 67). Eleven persons visited a health facility for treatment of their burn injury, but only one was admitted to hospital (Table 69). This was a female toddler aged 1 year 9 months of age who remained in hospital for 15 days but did not have any operations for her burn injury. She is not reported to have a disability as a result of the injury.

**Table 65 Cool, running water applied to the burned area for first aid**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Yes</b>	6	60.0%	3	37.5%	9	50.0%
<b>No</b>	4	40.0%	5	62.5%	9	50.0%
<b>Total</b>	10	100.0%	8	100.0%	18	100.0%

N: number of individuals † Column percent

**Table 66 Length of time cool running water applied**

Minutes	Male		Female		Total	
	N	%	N	%	N	%
2	0	0.0%	1	33.3%	1	11.1%
5	3	50.0%	2	66.7%	5	55.6%
15	1	16.7%	0	0.0%	1	11.1%
30	1	16.7%	0	0.0%	1	11.1%
120	1	16.7%	0	0.0%	1	11.1%
<b>Total</b>	6	100.0%	3	100.0%	9	100.0%

N: number of individuals † Column percent

**Table 67 Other home-based first aid**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Yes (Specify)</b>	9	90.0%	5	62.5%	14	77.8%
<b>No</b>	1	10.0%	3	37.5%	4	22.2%
<b>Total</b>	10	100.0%	8	100.0%	18	100.0%

N: number of individuals † Column percent

**Table 68 Accompaniment by friend or relative to health facility**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Yes</b>	6	100.0%	4	80.0%	10	90.9%
<b>No</b>	0	0.0%	1	20.0%	1	9.1%
<b>Total</b>	6	100.0%	5	100.0%	11	100.0%

N: number of individuals † Column percent

**Table 69 Admission to hospital**

	Other Injury		Burn Injury		Total	
	N	%	N	%	N	%
<b>Yes</b>	65	27.4%	1	9.1%	66	26.6%
<b>No</b>	172	72.6%	10	90.9%	182	73.4%
<b>Total</b>	237	100.0%	11	100.0%	248	100.0%

N: number of individuals † Column percent

#### 2.8.10 Injury (all causes) impacts – impairment and disability

Approximately one third of injured persons had not yet been able to return fully to their normal activity at the time of the survey (Table 70). For those able to return to work fully after injury (65.3%), the median length of time from injury to return to work was 35.4 days (IQR 15.0-67.3 days). For those able to return only partially to work (25.4%) the median length of time from injury to return to work was 60.8 days (IQR 20.0-100.8 days). Of the 274 persons who were injured more than 6 months ago, 26.6% have a disability (Table 72). There was a wide range of disabilities reported (Table 73), and 81.9% included difficulty or

inability in use of the limbs. In this small sample one person who sustained a burn injury more than 6 months ago (9.1%) was left with a disability (Table 74). This person was a 12 year old child who is unable to use an arm or hand.

**Table 70 Injury prevented usual activities for one or more days**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Yes</b>	174	95.1%	155	95.1%	329	95.1%
<b>No</b>	9	4.9%	8	4.9%	17	4.9%
<b>Total</b>	183	100.0%	163	100.0%	346	100.0%

N: number of individuals † Column percent

**Table 71 Return to normal activity since injury**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Yes, fully</b>	120	65.57%	106	63.2%	226	65.32%
<b>Yes, but only partially</b>	42	22.95%	46	29.7%	88	25.43%
<b>No</b>	21	11.48%	11	7.1%	32	9.25%
<b>Total</b>	183	100.0%	163	100.0%	346	100.0%

N: number of individuals † Column percent

**Table 72 Physical disability (if injury > 6 months ago)**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Yes</b>	39	21.3%	34	20.9%	73	21.1%
<b>No</b>	101	55.2%	100	61.3%	201	58.1%
<b>Injury happened less than 6 months ago</b>	43	23.5%	29	17.8%	72	20.8%
<b>Total</b>	183	100.0%	163	100.0%	346	100.0%

N: number of individuals † Column percent

**Table 73 Nature of physical disability**

	Male		Female		Total	
	N	%	N	%	N	%
Unable to use hand or arm	10	17.2%	6	10.3%	16	14.4%
Difficulty using hand or arm	11	19.0%	14	24.1%	25	22.5%
Unable to use legs	9	15.5%	7	12.1%	16	14.4%
Difficulty to use legs/Walk with a limp	20	34.5%	14	24.1%	34	30.6%
Loss of hearing	2	3.4%	0	0.0%	2	1.8%
Loss of vision	2	3.4%	0	0.0%	2	1.8%
Weakness or shortness of breath	2	3.4%	4	6.9%	6	5.4%
Inability to remember things	1	1.7%	1	1.7%	2	1.8%
Inability to chew food	1	1.7%	5	8.6%	6	5.4%
Back pain	0	0.0%	1	1.7%	1	0.9%
Headache and dizziness	0	0.0%	1	1.7%	1	0.9%
<b>Total</b>	<b>58</b>	<b>100.0%</b>	<b>53</b>	<b>100.0%</b>	<b>111</b>	<b>100.0%</b>

N: number of disabilities (may be more than one disability per person) † Column percent

**Table 74 Proportion of injuries (by cause) resulting in disability**

	Disability				Total	
	Yes		No			
	N	%	N	%	N	%
Traffic accident	3	21.43	11	78.57	14	100.0%
Fall	35	27.78	91	72.22	126	100.0%
Struck/hit by person or object	31	26.96	84	73.04	115	100.0%
Stab	1	100.00	0	0.00	1	100.0%
Fire, flames or heat	1	9.09	10	90.91	11	100.0%
Poisoning	0	0.00	1	100.00	1	100.0%
Animal bite/attack	0	0.00	2	100.00	2	100.0%
Foreign bodies	2	50.00	2	50.00	4	100.0%
Total	73		201		274	

N: number of individuals † Row percent

### 2.8.11 Injury (all causes) impacts – economic impact

As a result of the injury almost one third of injured persons (n=109) suffered loss of employment (Table 75). In just over one quarter (n=95) of the injuries, a household member lost days of work or school attendance to take care of the injured person (Table 76). The median loss of work/school days by the carer was 30.4 days (IQR: 10.0-60.8 days) and 37.9% of injuries were reported to lead to a decline in household income. This was particularly the case when the injured person was a male (Table 77). Decline in household food consumption was reported for 15.6% of injuries (Table 78) and 31.8% of injuries (n=110) required a loan to be taken out to pay for medical treatment or to make up for loss of income (Table 79). A small proportion of injuries (5.5%-7.2%) required the household to depend on charity or to sell household possessions to pay for medical treatment or to make up for loss of income (Tables 80-81).

**Table 75 Loss of employment (injured person) as a result of injury**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Yes</b>	70	38.3%	39	23.9%	109	31.5%
<b>No</b>	104	56.8%	120	73.6%	224	64.7%
<b>Not working at time of injury</b>	9	4.9%	4	2.5%	13	3.8%
<b>Total</b>	183	100.0%	163	100.0%	346	100.0%

N: number of individuals † Column percent

**Table 76 Loss of days of work/school by carer (household member)**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Yes</b>	47	25.7%	48	29.4%	95	27.5%
<b>No</b>	136	74.3%	115	70.6%	251	72.5%
<b>Total</b>	183	100.0%	163	100.0%	346	100.0%

N: number of individuals † Column percent

**Table 77 Decline in household income as a result of the injury**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Yes</b>	87	47.5%	44	27.0%	131	37.9%
<b>No</b>	96	52.5%	119	73.0%	215	62.1%
<b>Total</b>	183	100.0%	163	100.0%	346	100.0%

N: number of individuals † Column percent

**Table 78 Decline in household food consumption as a result of the injury**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Yes</b>	31	16.9%	23	14.1%	54	15.6%
<b>No</b>	152	83.1%	140	85.9%	292	84.4%
<b>Total</b>	183	100.0%	163	100.0%	346	100.0%

N: number of individuals † Column percent

**Table 79 Loans to pay for medical treatment of injured person or make up for loss of income**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Yes</b>	61	33.3%	49	30.1%	110	31.8%
<b>No</b>	120	65.6%	114	69.9%	234	67.6%
<b>Don't know</b>	2	1.1%	0	0.0%	2	0.6%
<b>Total</b>	183	100.0%	163	100.0%	346	100.0%

N: number of individuals † Column percent

**Table 80 Dependence on charity to pay for medical treatment or make up for loss of income**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Yes</b>	12	6.6%	7	4.3%	19	5.5%
<b>No</b>	170	92.9%	156	95.7%	326	94.2%
<b>Don't know</b>	1	0.5%	0	0.0%	1	0.3%
<b>Total</b>	183	100.0%	163	100.0%	346	100.0%

N: number of individuals † Column percent

**Table 81 Selling of possessions to pay for medical treatment or make up for loss of income**

	Male		Female		Total	
	N	%	N	%	N	%
<b>Yes</b>	13	7.1%	12	7.4%	25	7.2%
<b>No</b>	169	92.3%	151	92.6%	320	92.5%
<b>Don't know</b>	1	0.5%	0	0.0%	1	0.3%
<b>Total</b>	183	100.0%	163	100.0%	346	100.0%

N: number of individuals † Column percent

### 3. Suggested revisions to questionnaire

Minor revisions have been made to the questionnaire (see Appendix 4).

#### 4. Discussion and Conclusions

The main objective of this study was to test the “Community-based Injury Survey with Burns Module” under operational ‘real-world’ conditions. This pilot test was successfully undertaken in challenging field conditions in Nuwakot and Rasuwa districts, Nepal, and high quality data was obtained from 1080 households. Fatal injuries in the last 5 years (2012-2016) and non-fatal injuries in the last 18 months (April 25 2015 to December 2016) were measured, starting with the Nepal earthquake event. The survey collected household- and individual-level information on demographics, socio-economic factors and injuries and is based on the WHO Guidelines for Conducting Community Surveys on Injuries and Violence (Sethi et al. 2004). Additional burn-related questions were developed by a working group of burns experts initiated by the Global Alliance for Clean Cookstoves. The Global Alliance for Clean Cookstoves provided additional questions on household energy use and questions were also included to calculate the Progress Out of Poverty Index. This report presents a comprehensive description of the survey process and a summary of the survey results.

In addition to developing the content of the questionnaire with many levels of input and pre-testing, recruitment and training of field researchers was a key part of ensuring the successful survey. It was important during training to identify any ambiguous questions according to the understanding of the field researchers and to clarify all definitions and classifications. Definitions needed to be readily accessible in the electronic data collection tablet and/or field manual for quick reference. When carrying out the interviews with the respondent it was essential to communicate clearly what was meant by the term ‘injury’ as well as providing specific examples of injury causes and types - the use of the visual aid (flip chart) was reported to be very helpful by the field staff. It was also important to include free text options so that responses could be classified at a later stage when enumerators were unsure. The real-time desk monitoring and field monitoring also helped to clarify any misunderstandings during the operational phase. Technical and logistical support were critical components of the survey process.

The use of the electronic data collection platform (Kobo Collect) with strict pre-programmed criteria on data input was extremely efficient. There was no requirement to employ additional data entry staff and data quality was improved by reducing errors due to manual data handling. No back-up paper surveys had to be used for any households. In situations where there was lack of network coverage for data upload, the data could be stored on the device and sent later when the field researcher was in signal range. The use of the Kobo Collect platform is highly recommended, and HERD International has experience with its use which may be beneficial to other groups.

The questionnaire performed well; only minor revisions have been suggested. There was an error in the data programming which resulted in a missing option in Question 102\_PPI2, “In what type of job did the male head/spouse work the most hours during the past seven



days?" [01; no male head/spouse]. This could have had a minor impact on the validity of the PPI data. A question relating to the details of the improved cookstove (chimney and/or fan) was accidentally omitted.

The rates of non-fatal injuries obtained with this survey are consistent with those presented in other large community-based surveys, in particular a recent survey (3,441 households) conducted in children in rural Nepal by Pant and colleagues (Pant et al. 2015a). This latter study was conducted in Makwanpur district, south of Kathmandu. The annual rates of non-fatal injuries in the survey by Pant and colleagues were 29.0 per 1,000 (95% CI 21.1–39.7) in children 5 years and under, 30.3 per 1,000 (95% CI 23.7–38.7) in children 5-9 years of age, and 26.0 per 1,000 (95% CI 20.6–32.8) in children 10-14 years. In our survey the rates were 24.8 per 1,000 (95% CI 10.1-39.5) in children under 5 years and 32.3 per 1,000 (95% CI 21.2-43.5) in children 5-14 years. Patterns of cause of injury were also similar, with falls the most common cause of injury. The survey by Pant had a much larger sample size than this pilot study and provided more accurate estimates. It should also be noted that Pant et al. used a more 'serious' case definition than the injuries in this report (3 days vs. 1 day change in normal activity). A national survey conducted in Bangladesh (171,366 households) found the injury rate in rural children under 17 years of age was also comparable, with 21.77 injuries per 1,000 child years (95% CI 20.99-22.85) (Chowdhury et al. 2009).

Burn injury rates in the under 5 age group are presented here as an indicator instead of the 14 and under age-group indicated in the 'Aims'; this focused age group allows for interesting comparisons. The annual rates of non-fatal burn injuries in children under 5 years estimated in both these studies conducted in rural Nepal (Makwanpur: 8.6 per 1,000 [95% CI 4.8-15.4]; Nuwakot/Rasuwa: 7.8 per 1,000) and by Mashreky and colleagues in Bangladesh (7.82 per 1,000 [95% CI 6.97-13.03]) (Mashreky et al. 2008), are more than an order of magnitude lower than the rates for non-serious burn injuries reported by Mortimer and colleagues (Mortimer et al. 2017) in rural Malawi for children under 5 years in 4,214 households using open fires (approximately 119 per 1,000 child years). This may reflect real differences in risk related to the setting, but the lack of specified inclusion criteria for 'non-serious' burns in Mortimer's paper demonstrates the need for consistent case definitions of injuries to enable comparison between studies.

In this survey half of the burn injuries were in children 18 years and under. The morning was a very common time for burn injury and the majority of burns occurred in the home (83.3%), 80% of these in the kitchen. Half of the burn injuries were directly associated with cooking. Scalds were the most common cause of burn injury (55.6%), followed by flame burns (38.9%) and contact burns (5.5%).

The new burns module was able to provide in-depth information about burn injury causes, health seeking behaviour and impacts. Detailed information about the burn injury events, particularly from larger samples, will enable tailored burn prevention interventions to be

designed - for example, scenarios for injury prevention education for mothers in women's groups (Pant et al. 2015c). This information comes from the additional variables which include: event contributing to burn injury, primary cause of burn (flame burn, scald, contact etc.), fuel type causing flame burn, type of cookstove, access to cookstove by children, equipment problems, risky activities, ignition of clothing, medical predisposition and first aid. Inadequate first aid for burn injuries was identified as a problem. In terms of capturing information about burn injury severity, the survey showed that in this sample of 1080 household there were no burn deaths, 11 people attended a health facility for burn treatment, 1 person was admitted to hospital and 1 person had a disability resulting from a burn injury. This latter person was not hospitalised despite having a significant injury, demonstrating that the survey can identify gaps in the appropriate treatment pathway.

Difficulties in the mode of transportation of injured persons to health facilities were observed for injured persons generally. The survey also provided detailed information on the impacts of injury and revealed significant levels of impairment and disability and socioeconomic impacts. Approximately one third of injured persons had not yet been able to return fully to their normal activity at the time of the survey, and of those injured more than 6 months previously, 26.6% had a current disability. For those able to return to work fully after injury (65.3%), the median length of time from injury to return to work was 35.4 days. In nearly one third of all injury cases (31.8%) the household had to take out a loan to pay for medical treatment or to make up for loss of income. These impacts will be the subject of follow-on publications.

The PPI was used as the poverty indicator in this study and demonstrated that households with at least one injury case were more likely to be below the national poverty line. However, some caution needs to be exercised in interpreting the PPI, as it was surprising that households in Nuwakot district had a significantly higher mean likelihood of being in poverty than those in Rasuwa, when Rasuwa had a much higher proportion of households still living in temporary shelter after the earthquake. The PPI may not be sensitive to the link between 'temporary' shelter and poverty and so may not be valid in this context.

The other key output of this survey was the collection of data on non-fatal injuries and injury deaths resulting from the Nepal earthquakes in 2015. There was a higher proportion of households with earthquake fatalities in Rasuwa (7%) than in Nuwakot (2.2%), and almost all deaths were in adults > 18 years. The earthquake fatality rate in adults was 12.7 per 1,000 (95% CI 8.6-16.8). The highest non-fatal injury rate was also in adults > 18 years (34.6 per 1,000 [95% CI 27.9-41.3]). The data will form the basis of a significant publication on the medium-term health and socio-economic impacts of injuries from this natural disaster, and the gap in resources that exists for transporting and treating injured persons in rural Nepal.

The "Community-based Injury Survey with Burns Module" will be a valuable tool for future studies, where information on burn injuries is desired for burn prevention interventions

(including cookstove interventions) and service planning. The survey can be undertaken successfully in a low-income country setting provided adequate technical support is in place. The relatively low absolute rate of burn injuries means that large sample sizes are required for accurate estimates. However a range of study designs are possible that can utilize the questionnaire in part or as a whole, and the data from this study can assist in calculating sample sizes. Questions from the survey will also be included in future household surveys for non-communicable diseases, including those being developed in 'Surveys for Urban Equity', a Global Challenge Research Fund project funded by the Medical Research Council, UK.

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## Glossary

**Agricultural land:** Refers to fields, uplands, lowlands, etc. that are used for agriculture. Kitchen gardens and the land which the household own does not count.

**Bedroom:** Only count rooms exclusively used for sleeping. If a household is made up of multiple buildings, count all rooms used only for sleeping in all of the buildings.

**Biogas:** Gas produced by fermentation of animal, plant and food waste in a closed system.

**Biomass:** Plants or plant-based materials used as an energy source.

**Bruise or superficial injury:** The skin changes colour (e.g. blue or purple) from damage, but it is not broken or bleeding.

**Burn:** The skin is damaged by something hot (hot liquid, flames/fire, hot object), electricity, chemicals or friction.

**Poisoning:** A harmful substance is swallowed or comes into contact with the skin.

**Charcoal:** A lightweight, black, solid fuel, consisting of carbon and any remaining ash. Charcoal is usually produced by the heating of wood.

**Chemical burn:** Damage to the skin caused by contact with chemicals.

**Coal:** A flammable black hard rock used as a solid fossil fuel.

**Communal latrine:** A communal latrine is used by more than one household and is usually very rudimentary.

**Concrete/cement:** Is a composite building and construction material, used mainly in roofing and facade products because of its strength and durability.

**Concussion/head injury:** A blow to the head causes dizziness, confusion or unconsciousness (Note: this does not include facial injuries – these should be recorded as cuts, bruises, fractures etc).

**Construction:** Building construction.

**Cookstove:** Any kind of stove used for cooking. It could be open-fire stove or improved cook stove.

**Corridor:** A passage-way.

**Cut, bite or other open wound:** Skin is broken and there is usually bleeding.

**Dementia or mental disability:** Reduced mental or thinking ability.

**Disability:** Any lack of ability to perform an activity within the range considered normal for a human being.

**Doko:** Bamboo basket used to carry goods, vegetables, grains, water pots, etc.

**Electrical burn:** Burn from electricity.

**Electrical water heater:** Water is heated by electricity.

**Fracture (broken bone):** Any bone of the body was broken. The broken bone may be under the skin or poking through.

**Friction burn:** Damage to the skin caused by rubbing against a rough surface.

**Gas lamp:** Lamp that uses gas in a cylinder.

**Gas stove:** A cookstove that burns LPG from a gas cylinder.

**Generator:** Generator produces electricity from diesel fuel.

**Head injury/concussion:** A blow to the head that causes dizziness, confusion or unconsciousness (Note: this does not include facial injuries – these should be recorded as cuts, bruises, fractures etc).

**Heater/space heater:** Any method or instrument used to make the house or rooms warm.

**Household flush toilet:** A toilet used only by the household, which washes away waste using a machine or bucket, to a sewage system or septic tank.

**Household Head:** Head of household is the member of household who is managing household activities and takes the decisions as well as responsibility in all household related matters (including income/expenses/finances). The Head can be either sex – male or female.

**Household member:** A person is counted as a household member if they live, eat and share income & expenses with other household members, and they have done so for the past six months; or intend to do so for the next six months. Newborns or newly married into the family people should count as members, even if they have not lived in the house for six months. Hired help, those who do not share meals, and those who have left the house permanently at the time of interview DO NOT count.

**Improved cookstove/manufactured cookstove:** A stove made to consume less fuel or produce less smoke - with an enclosed combustion chamber or ventilation system (chimney).

**Injury:** An injury is any physical damage to the body such as a wound, bruise, burn, fracture, internal injury, poisoning or loss of consciousness due to a blow to the head or neck, suffocation/strangulation, and for this study it should be ***serious enough to need medical treatment or to change their 'normal' activity for one or more days.***

**Internal injury/internal organ injury:** Damage to the inside organs of the body – the skin may be intact or broken.

**Irrigated land:** Irrigated land is watered by human effort, other than rain or ice melt.

**Kerosene lamp:** Lamp consisting of kerosene and a wick.



**Kerosene stove:** A stove that consists of a tank of kerosene which is pressurized by pumping.

**LPG water heater:** Water is heated by LPG gas in a geyser.

**Manufactured cookstove /improved cookstove:** A stove made to consume less fuel or produce less smoke - with an enclosed combustion chamber or ventilation system (chimney).

**Mortgaged-in land:** Land used by the household in exchange for a fixed cash payment (rent).

**Oil lamp:** Lamp consisting of oil and a wick.

**Outside walls:** This question only refers to the outside walls of the household itself and not any compound or boundary walls that surround the household.

**Petrochemical:** Refining and processing of petroleum or natural gas.

**Prescription drugs:** Medications from a doctor or pharmacist.

**Processed biomass (pellets) or woodchips/ briquette:** Fuel which has been through a manufacturing process.

**Psychiatric or psychological disorder:** Unstable mind.

**Self-employed person:** A person invested in their own business.

**Share cropped-in land:** Land used by the household in exchange for dividing the harvest with the landlord.

**Solar home system:** Solar panels use energy from the sun to charge a battery bank, which in turn is used to power the lights.

**Solar lantern:** Portable rechargeable light that is powered by the sun using a solar panel.

**Solar water heater:** Water is heated by the sun, normally in a collector on the roof.

**Solar:** Light and heat energy from the sun.

**Space heating/heater:** Any method or instrument used to make the house or rooms warm.

**Sprain or dislocation:** Joint or muscle is damaged but no bones are broken (includes limbs, neck or back).

**Suffocation:** The person cannot breathe because air cannot get into the body.

**Textiles:** Weaving, fabrics etc.

**Thatch:** dried straw, reeds, etc. used for making a roof; a roof made of this material.

**Tiles:** A flat, usually square, piece of baked clay or other material that is used in rows for covering the roof.

**Traditional open-fire stove:** Stove made by the user, where the fire is not enclosed. Usually made from three stones, mud or iron rods.

**Wage earner:** A wage earner is a paid worker.

**Wood/planks:** Wooden boards.

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# A Report on the Implementation Process of the Community- based Injury Survey with Burn Module: Pilot Field Testing



HERD International

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and Sushil Chandra Baral

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## 1. Introduction

HERD International based in Kathmandu, Nepal implemented this household in 2016 in two districts of Nepal (Nuwakot and Rasuwa) with an objective to pilot test the community-based injury survey with burn module in Nepal. The United Nations Foundations and its Global Alliance for Clean Cookstoves (GACC) initiative provided financial support, whereas Dr Hilary Wallace from the University of Western Australia provided technical support.

This pilot survey collected data about the rate of burn injuries in the community (mortality and morbidity), household hazards and risk factors for burn injury, health-seeking behaviour, treatment of burn injury and the impact of burn injury. This survey is will provide guidance for future large-scale surveys (operational practicality, performance of questions). The analysis of the pilot data will provide some estimates of injury rates.

## 2. Scope of Process Report

This process report highlights about various processes involved for the implementation of the Community-based Injury Survey with Burn Module. The report is organised in informing following processes of this survey implementation:

- Questionnaire translation and Programming
- Ethical Approval
- Field Researcher Recruitment
- Training of the Field Researchers
- Summary of the Survey Logistics
- Field implementation
- Field Experience Sharing Meeting
- Data Quality Assurance
- Data Quality Control
- Appendices

## 3. Questionnaire Translation and Programming

The Household Questionnaire was provided by Dr Hilary Wallace was translated into Nepali. The Nepali version of the questionnaire was then back translated into English, and then was programmed in Open Data Kit (ODK) which is a programming language. A database of the questionnaire was developed in ODK which uses a Microsoft Excel template and an electronic questionnaire was created using the ODK syntax which also controlled the skip patterns making the questionnaire more user friendly.

Once the tool was programmed, it was uploaded into the HERD's central server and any inconsistencies were checked and edited. The final tool once verified was again uploaded into the server and made accessible for downloading into the android tablets.

## 4. Ethical Approval

Ethical clearance proposal was submitted to the Nepal Health Research Council (NHRC) on 6 June 2016 and the approval was obtained from the Council on 28 July 2016.

## 5. Field Researcher Recruitment

HERD International has a practice of maintaining database of the field researchers. The availability of the field researchers was checked by making telephone calls from the HERD HR section. The field researchers were briefed about Burn and Injury survey, and the tentative date of field work. This gave them time to confirm their availability. Altogether, 28 field researchers with educational background of public health and social sciences were called for the interview.

The interviews took place on 14 November 2016 at HERD. Two senior researchers at HERD interviewed all the candidates. A checklist was used to assess their knowledge, skills and previous experience in working in research, and flexibility to work in remote areas of Nepal. Based on the overall impression from the interviews, 21 field researchers were selected – eight males and thirteen females. One of the field researchers was selected as an alternative (as a back-up) just in case someone drops out. The selected field researchers were informed about the dates and venue of the training through telephone calls.

## 6. Training of the Field Researchers

A four-day training was organised for the field researchers on 21, 22, 23 and 25 November 2016 at SAP Falcha, Kathmandu, Nepal from 8:30 AM to 5:30 PM. The training acquainted the field researchers on various topics as follows:

- Concepts surrounding 'injury' and 'burn injury'
- Significance of injuries in Nepal
- Case definition and differentiation between 'cause' and 'type' of injury
- Methodology and household listing procedure
- Visual guide to injuries
- Refining of survey questions for understanding and accuracy
- Training on use of android tablets and data upload
- Field visit and mock sessions
- Professional development/organisation norms and safety procedures
- Financial and logistics management

The sessions were conducted in a very participatory approach with series of 'questioning and answering' to ensure that the concepts were understood by the field researchers. The questionnaire was discussed in detail to assure all the researchers understood their meaning and objectives. Dr Hilary Wallace provided additional inputs where needed which was translated into Nepali by Mr Uden Maharjan. This way, it ensured that the complex concepts surrounding injury and burn injury were understood by the researchers.

Session on the use of android tablets as a tool for data collection was conducted which was followed by the data saving and uploading. The HERD trainers provided guidance to the field researchers

throughout the tablet session which enhanced their skill in proper use of tablet. Mock interviews were practiced among the trainees using the tablets and reflections were discussed and feedback was provided. A session on methodology and household listing and sampling procedure was also conducted.

On the third day of the training, the field researchers were taken to an earthquake affected semi-urban community in the southern part of Kathmandu for a field visit. The main objectives of the field visit were: to provide a real setting exposure to the field researchers, and to test and revise the data collection tool (Household Questionnaire). The researchers practiced household listing with the key informants of the community and conducted interviews with some of the households using the tablets. The Survey team from HERD monitored and supervised the field work. The issues encountered during the field was later discussed after arriving to the training venue, and given feedback to the team.

The HERD team further refined the questionnaire and its programming based on the errors identified from the mock sessions and field visit. On the final day of the training, 25 November, the refined tool was again practiced among the researchers through mock interviews and feedback was collected before the programming is finalised.

The training also covered sessions on norms and values of HERD, moral conducts during the field trial, and safety and team work. The researchers were also enlightened about the financial and administrative as well as reporting mechanism.

## 7. Summary of field test logistics

HERD Int'l provided the field researchers all the logistics required for the data collection. The required logistics was requested to the logistic department through web-based Management Information System of HERD. Then the logistic team prepared all the logistics ready to be taken to the field. The list of logistics provided to the field researchers is provided in the [Appendice C](#).

## 8. Field Implementation

A field implementation of this survey was conducted from 1 to 24 December 2016 in two survey districts: Nuwakot and Rasuwa. In total, 30 clusters were sampled from these districts. Nuwakot composited 26 clusters and Rasuwa composited 4 clusters. From the total sample of 1080 households, 4598 individual data were collected.

### 8.1 Data Collection

The researchers were divided into five teams with four members each. Four teams were mobilised to Nuwakot and one team was mobilised to Rasuwa. All five teams were assigned to particular clusters in each district. One field researchers from each teams were selected as the Team Supervisor. All the teams departed for the assigned districts on 30 November 2016, and started data collection from 1 to 24 December.

### 8.2 Monitoring and Supervision Visits

A team of two from HERD International made a monitoring and supervision visits to survey clusters from 4 to 8 December. The team met the field researchers team and supervised the data collection work. The monitoring team supported in the household listing procedure and coordination with the

local key informants. They also provided feedback and necessary technical input to the field researchers' team.

## 9. Field Experience Sharing Meeting

After the completion of data completion, a field experience sharing meeting was organised at HERD on 29 December 2016. All the field research teams shared their experiences from the field. Some of the points the teams shared were:

- Geographical challenges due to the remote and mountainous regions
- Poor telephone networks hindered the timely communication to HERD team
- Difficulty in accommodation and lodging due to lack of hotels as a result of earthquake
- Challenging to meet household members due to their agricultural work
- Better rapport building with the FCHVs and key local informants
- Timely and supportive supervision and feedback from the HERD team

## 10. Data Quality assurance procedures

Data quality was assured in terms of its validity and reliability in different phases of the study, including the designing of the study, data collection, monitoring and analysis.

### 10.1 Device for Data Collection

Samsung Tablets 3 with Android 4.4 version were used as devices for electronic questionnaires. KoBo Collect was used for downloading the questionnaire, viewing, recording responses and uploading the questionnaire. The data collected in the field with the tablets were uploaded using the SIM card enabled internet data into the cloud based server where the uploaded data was stored. The syntax programmed in the ODK controlled the skip patterns.

### 10.2 Designing Study Tool

Translation and back translation of the questionnaire was done in order to ensure the proposed meaning of the study questions remained intact as in the original tool. The tool was pretested prior to the field researchers' training and a field trial was done during the training period. To ensure the uniformity in the understanding among the field enumerators, they were provided with field manual containing detail information about data collection procedure and questionnaire. Additionally, contact list was given to field researchers to communicate with the HERD team in order to sort out the issues they face while working in field.

### 10.3 Data Collection Phase

Supervisors from each team were responsible at the field level to facilitate the team members for data collection. They were responsible to check the filled questionnaire for consistency and correctness at each team. As data was collected using the tablet, it allowed checking at data collection time itself. The tablets were password protected that prevented deletion of the files once it is used for data collection.



## 10.4 Monitoring

During monitoring visits, field monitors used field monitoring checklist to record the researchers' skills on making field movement plan, doing coordination, rapport building, way of asking questions, neutrality during interview, maintain coherence between two questions etc.

## 10.5 Real time monitoring

As the data were directly uploaded into the server, immediate feedback was also provided to the field researchers by the Data Management Officer based on the identified issues.

## 10.6 Desk monitoring

Bi-weekly desk monitoring was also done to clarify any technical difficulties and to ensuring if the data collection process was on track. Communication and Monitoring Desk was responsible for communicating to field teams for regular updates and field issues. Team Supervisor, had to call on every Mondays and Thursdays at 9:30 am to 3:30 pm for reporting the field updates. For any technical issues, researchers were requested to call Core Team members of Burn and Injury survey at HERD Int'l.

## 10.7 Post data collection

Data uploaded into the server were exported to spreadsheet for data coding. After coding, data was exported to SPSS for cleaning, validity checking and then analysed using SPSS version 20.0.

# 11. Data Quality control

Quality control processes during the data management phase seeks to identify all the errors which was not identified in the earlier phases. Some of the steps taken for maintaining the quality are explained below.

## 11.1 Missing data

Tool was designed/programming in such a way where all the question is required. Due to which we don't have any missing data in the dataset. This was possible due to the programming done in tablet in which data collector couldn't proceed to next question without entering the response in each question.

## 11.2 Completeness

Completeness was checked through the programming in tablet. If the question is not completed than the data collector could not send the data to the server. So, this could be easily identified by the data collector.

## 11.3 Consistency

The consistency of the data was checked through different command or syntax. All the skip patterns were pre-programmed in the tablets due to which the data follow the instructions which helped in making the data more consistent and complete.

## 11.4 Outlier

When one or more data or cases are identified extremely different from all other values then field enumerators were called through telephone and rectified accordingly. Some of the data was treated by removing outliers from the analysis and some were assign another value that is less extreme.

## 11.5 Tabulation

After cleaning all the data and preparing the final dataset, analysis was done.

## 12. Appendices

### A. Survey Questionnaire (Nepali Version)

# COMMUNITY – BASED INJURY SURVEY WITH BURNS

## MODULE

### PILOT FIELD TEST

#### 2016



### सु-सूचित मञ्जूरीनामा

नमस्कार, मेरो नाम ..... हो । म HERD International बाट आएको/की हुँ । HERD International जनस्वास्थ्य तथा सामाजिक क्षेत्रमा स्वास्थ्य तथा जनसंख्या मन्त्रालयको लागि कार्यक्रम कार्यान्वयन तथा रिसर्च गर्ने एउटा नीजि संस्था हो । हाल हामी चोटपटक तथा जलनसँग सम्बन्धित सामुदायिक सर्वेक्षणको परीक्षण गर्न गईरहेकाछौ ।

यस सर्वेक्षणको मुख्य उद्देश्य भनेको चोटपटकको समस्या कतिको ठूलो छ, चोटपटकको समस्याले तपाईंको परिवारमा कसरी असर पारेको छ, चोटपटक के कारणले हुन्छ र त्यसका लागि कस्ता प्रकारका स्वास्थ्य सेवाहरु चाहिन्छ भन्ने कुरा बुझ्नु हो । उक्त जानकारीहरु लिनका लागि हामी यस समुदायमा घरधुरी सर्वेक्षण गरिरहेकाछौ । त्यसको लागि म तपाईं तथा तपाईंको परिवारका सदस्यहरूसँग कुराकानी गर्न चाहन्छु ।

हाम्रो कुराकानी करिब ३० देखि ४० मिनेटको रहने छ । तपाईंले दिएका सम्पूर्ण जानकारीहरु गोप्य राखिनेछ, साथै उक्त जानकारीहरु पहिचान खुल्ने गरी कहीं पनि उल्लेख गरिने छैन । तपाईं यस अध्ययनमा सहभागी हुन वा नहुन पनि सक्नुहुनेछ । तपाईंलाई मैले गरेका कुनै पनि प्रश्नको जवाफ दिन मन नलागेमा नदिन पनि सक्नुहुनेछ र हामी अर्को प्रश्नमा जानेछौं अथवा तपाईंले जुनसुकै समयमा पनि हाम्रो कुराकानीलाई रोक्न सक्नुहुनेछ । तर तपाईंले यस अध्ययनमा महत्वपूर्ण जानकारीहरु दिई सहभागी भएर सहयोग गर्नु हुनेछ भन्ने आशा लिएको छु । तपाईंका जानकारीहरुले सामुदायिक सर्वेक्षणको प्रश्नावलीमा सुधार ल्याउन महत्वपूर्ण सहयोग गर्नेछ ।

तपाईं यस अध्ययनको बारेमा थप जान्न चाहनुहुन्छ भने HERD international का कार्यकारी निर्देशक डा. सुशिल चन्द्र बराल (फोन, ०१-४२३८०४५) सँग सम्पर्क गर्न सक्नुहुनेछ ।

यदि तपाईं मलाई केही प्रश्न सोध्न चाहनु हुन्छ कुनै पनी बेला सोध्न सक्नुहुन्छ ।

तपाईंको केहि जिज्ञासाहरु छन् ? ☐ छैन ☐

के तपाईं यो सर्वेक्षणमा सहभागी हुन चाहनुहुन्छ ? चाहन्छु.....१ (अन्तर्वार्ता शुरु गर्ने)

चाहन्न.....२ (अन्तर्वार्ता अन्त्य गर्ने)

उत्तरदाताको सही

मिति

### सर्वेक्षक अन्तर्वार्ता लिन गएको पटक

अन्तर्वार्ता मिति	<input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / २०१६
	दिन महिना साल
अन्तर्वार्ता लिने व्यक्तिको नाम	.....
अन्तर्वार्ता लिने व्यक्तिको हस्ताक्षर	.....
अन्तर्वार्ता नतिजा	अन्तर्वार्ता सम्पन्न भयो..... १ अर्को पटक अन्तर्वार्ता दिन्छु भनेको.. २ अन्तर्वार्ता दिन अस्वीकार गरेको..... ३ आंशिक सम्पन्न भयो..... ४ अन्य (खुलाउनुहोस्)..... ९६

**खण्ड १: घरधुरी/क्लसटर पहिचान**

प्र.न.	प्रश्न	उत्तरहरू	कोड	स्किप
१	जिल्लाको नाम	नुवाकोट..... रसुवा .....	१ २	
२	गा.वि.स/नगरपालिका	.....		
३	वार्ड नं	<input type="text"/> <input type="text"/>		
४	घरमुलीको नाम	.....		
५	घरमुलीको लिङ्ग	महिला ..... पुरुष ..... तेस्रो लिङ्ग .....	१ २ ३	
६	उत्तरदाताको नाम	.....		
७	उत्तरदाताको उमेर	<input type="text"/> <input type="text"/>		
८	उत्तरदाताको लिङ्ग	महिला ..... पुरुष ..... तेस्रो लिङ्ग .....	१ २ ३	

**समूह क : घरधुरी सम्बन्धि जानकारी**

**क.१ घरधुरी विवरण “अब म तपाईंको घरको बारेमा केही प्रश्नहरू सोध्नेछु।”**

प्र.न.	प्रश्न	उत्तरहरू	कोड	स्किप
१०१	तपाईंको जात/जातिय पहिचान के हो ?	दलित पहाड..... दलित तराई ..... पहाड जनजाती ..... तराई जनजाती ..... मधेशी ..... मुस्लिम ..... ब्राहमण/क्षेत्री ..... अन्य (खुलाउनुहोस्) .....	१ २ ३ ४ ५ ६ ७ ९६	
१०२-१	तपाईंको घरमा कति जना सदस्य हुनुहुन्छ ?	आठ वा सो भन्दा बढी..... सात जना ..... छ जना ..... पाँच जना ..... चार जना ..... तीन जना ..... एक वा दुई जना .....	१ २ ३ ४ ५ ६ ७	

प्र.न.	प्रश्न	उत्तरहरू	कोड	स्किप
१०२-२	गएको हप्तामा तपाईंको घरमुलीले सबैभन्दा बढी कस्तो प्रकारको काम गर्नुभएको थियो ?	काम गर्नुभएन वा कृषि क्षेत्रमा दैनिक ज्यालादारी वा ठेक्का वा करारमा काम गर्नुभयो..... गैर कृषि क्षेत्रमा दैनिक ज्यालादारी वा ठेक्का वा करारमा काम गर्नुभयो..... आफ्नै जमिनमा कृषि सम्बन्धि काम गर्नुभयो..... गैर कृषि सम्बन्धि आफ्नै काम गर्नुभयो.... लामो अवधिको लागि ज्यालादारीमा काम.. गर्ने गरेको छ (कृषि वा गैर कृषि क्षेत्रमा)	१ २ ३ ४ ५	
१०२-३	तपाईंको घरमा कतिवटा सुत्ने कोठाहरू छन् ?	छैन..... एक वटा..... दुई वटा..... तिन वा बढी.....	१ २ ३ ४	
१०२-४	तपाईंको घरको बाहिरी भित्ता के ले बनाइएको हो ? (अवलोकन गर्नु होला)	बाँस/खर,काँचो इट्टा, काँठ/दुङ्गा, वा बाहिरी भित्ता नभएको..... सिमेन्टले जोडिएको इट्टा/दुङ्गा, वा सिमेन्ट ब्लक..... अन्य (खुलाउनुहोस्).....	१ २ ९६	
१०२-५	तपाईंको घरको छानामा प्रयोग गरिएको मुख्य बस्तु के हो ? (अवलोकन गर्नु होला)	पराल/खर, वा दुङ्गा/माटो ..... टायल/दुङ्गा/खपेटा ..... काँठ/फल्याक,वा जस्तापाता..... सिमेन्टको ढलान/ सिमेन्ट ..... अन्य (खुलाउनुहोस्).....	१ २ ३ ४ ९६	
१०२-८	तपाईंको परिवारका सदस्यसहरूले कस्तो किसिमको चर्पी(शौचालय) को प्रयोग गर्नुहुन्छ ? (अवलोकन गर्नु होला)	छैन ..... फ्ल्स नभएको वा सामुदायिक शौचालय... फ्ल्स भएको शौचालय .....	१ २ ३	
१०२-९	तपाईंको परिवारका सदस्यसँग कतिवटा टेलिफोन सेट/कर्डलेस /मोबाइल छ ?	छैन ..... एक ..... दुई वा बढी .....	१ २ ३	
१०२-१०	तपाईंको परिवारको स्वामित्वमा आफ्नै कृषि जमिन वा अधियाँ/वटैया वा बन्धकीमा लिएको जमिन छ ? यदि छ भने कुनै सिञ्चित जमिन छ ?	छैन ..... छ तर सिञ्चित छैन ..... छ र केहि भाग सिञ्चित छ .....	१ २ ३	
१०३	भुकम्प देखि यता तपाईंको परिवार कहाँ बस्दै आउनु भएको छ ?	पहिलेकै घरमा (भुकम्प अघिबसेको घर) .... पहिलेकै जमिनमा तर अर्को नयाँ घर वा वासस्थान ..... अर्को जमिनको भाडाको घरमा ..... संस्थागत वासस्थान ..... नातेदार/साथीको घर ..... अस्थायी बास/त्रिपाल ..... अन्य (खुलाउनुहोस्) .....	१ २ ३ ४ ५ ६ ९६	

### क.२ घरेलु उर्जा प्रयोग र त्यस सम्बन्धि पूरक जानकारी

“अब म तपाईंको घरमा खाना बनाउन तथा अन्य काममा प्रयोग हुने इन्धन र ऊर्जाको श्रोतको बारेमा केही प्रश्नहरू सोध्नेछु ।”

प्र.न.	प्रश्न	उत्तरहरू/कोडिङ्ग वर्गिकरण	कोड	स्किप
१०६	तपाईंको घरमा खाना पकाउनको लागि प्रायः कस्तो चुल्हो प्रयोग गर्नुहुन्छ ?	खुल्ला चुल्हो वा मट्टितेल चुल्हो .... ग्याँस स्टोभ ..... सुधारिएको चुल्हो ..... घरमा खाना नपकाउने ..... अन्य (खुलाउनुहोस्).....	१ २ ३ ४ ९६	यदि “चुलो नभए” प्र.नं १११ मा जानुहोस् ।
१०७	तपाईंको घरमा खाना पकाउनको लागि प्रायः कस्तो ईन्धनको प्रयोग गर्नुहुन्छ ? (एउटा मात्र उत्तर आउने)	बिजुली ..... सोलार ..... एल.पी.जी.ग्याँस ..... बायो ग्याँस ..... मट्टितेल ..... कोइला (काठको) ..... पत्थरको कोइला ..... काठ /दाउरा ..... गुइँठा ..... पराल/भाडी/घाँस/पात ..... अन्य (खुलाउनुहोस्).....	०१ ०२ ०३ ०४ ०५ ०६ ०७ ०८ ०९ १० ९६	
१०७ क	तपाईंको घरमा खाना बनाउनको लागि अन्य कुनै इन्धन प्रयोग गर्नुहुन्छ ?	गर्छु ..... गर्दिन.....	१ २	यदि २ आएमा प्र.नं. १०९ मा जानुहोस्
१०८	यदि गर्नुहुन्छ भने, कुन-कुन इन्धन प्रयोग गर्नु हुन्छ ? (प्रयोग गरेका अरु सबै गोलो लगाउनुहोस्)	बिजुली ..... सोलार ..... एल.पी.जी.ग्याँस ..... बायो ग्याँस ..... मट्टितेल ..... कोइला (काठको) ..... पत्थरको कोइला/नरम खालको कोइला..... काठ /दाउरा ..... गुइँठा ..... पराल/भाडी/घाँस/पात ..... अन्य (खुलाउनुहोस्).....	१ २ ३ ४ ५ ६ ७ ८ ९ १० ९६	
१०९	सामान्यतया, खाना घरबाहिर बनाउनुहुन्छ कि घरभित्र बनाउनुहुन्छ ?	घरभित्र ..... छुट्टै भवनमा ..... घरबाहिर ..... अन्य (खुलाउनुहोस्).....	१ २ ३ ९६	यदि “३”आएमा प्र.नं १११ मा जाने ।
११०	तपाईंको घरमा भान्साको लागि छुट्टै कोठा छ ?	छ ..... छैन.....	१ २	
१११	तपाईंको घरमा राति बत्तीको लागि प्रयोग गर्ने मुख्य श्रोत कुन हो ? (एउटा उत्तर मात्र छान्नुहोस्)	बत्ती छैन ..... बिजुली ..... सोलार ..... जेनेरेटर ..... सौर्य उर्जाबाट बल्ने लालटिन ..... टर्च .....	१ २ ३ ४ ५ ६	

प्र.न.	प्रश्न	उत्तरहरू/कोडिङ्ग वर्गिकरण	कोड	स्किप
		ग्याँसबाट बल्ने बत्ती ..... टुकी बत्ती ..... दियो ..... मैनबत्ती ..... अन्य (खुलाउनुहोस्).....	७ ८ ९ १० १६	
११२	आवश्यकता पर्दा तपाईं नुहाउने पानी तताउनको लागि कुन उपाय अपनाउनु हुन्छ ? (एउटा उत्तर मात्र छान्नुहोस्)	पानी तताउदैना ..... सोलार हिटर ..... बिजुली हिटर ..... ग्याँस गिजर ..... खना पकाउन प्रयोग हुने स्टोभ ..... अन्य (खुलाउनुहोस्).....	१ २ ३ ४ ५ १६	यदि “४” आएमा प्र.न. ११३ मा जाने र त्यो बाहेक अन्य आएमा प्र.न. ११४ मा जानो
११३	के ग्याँस गिजर बाथरूम भित्र रहेको छ ? (अवलोकन गर्नुहोस्)	छ ..... छैन .....	१ २	
११४	आवश्यकता पर्दा तपाईं घरमा तातो बनाउनको लागि मुख्य कुन उपाय अपनाउने गर्नुहुन्छ ? (एउटा उत्तर मात्र छान्नुहोस्)	तातो बनाउदैना ..... बिजुली हिटर (Electric Heater)..... ग्याँस स्पेस हिटर (Gas Heater)..... मट्टितेल हिटर (Kerosene Heater) ..... पत्थरको कोइला..... काठको कोइला..... काठ/दाउरा ..... ब्रिकेट/काठको टुक्रा-टाक्री..... अन्य (खुलाउनुहोस्).....	१ २ ३ ४ ५ ६ ७ ८ १६	यदि “१ देखि ४” भए क.२ (स१) मा जानो ।
११५	कृपया स्पेस हिटरको (कोठा/घर) तताउने विधि बारेमा भन्नुहोस् ।			
११५-१	के यो परम्परागत/खुल्ला वा सुधारिएको (व्यवसाहिक रुपमा उत्पादित) हो ?	परम्परागत/खुल्ला ..... सुधारिएको (व्यवसाहिक रुपमा उत्पादित) ...	१ २	
११५-२	धुँवा निस्कने ठाँउ (चिमनी) छ ?	छ..... छैन.....	१ २	
११५-३	पड्खा छ ?	छ..... छैन.....	१ २	
क.२ अतिरिक्त जानकारी				
क.२-स १	कसैलाई पोलेको अवस्थामा सबै भन्दा राम्रो प्राथमिक उपचार के हो ?	(कृपया लेख्नुहोस्) ..... ..... ..... थाहा छैन ..... भन्न नचाहेका .....	१८ १९	



### क.३ चोटपटक सम्बन्धी मृत्युको छानबिन

मानिसहरू अप्रत्यासित रूपमा, जानाजानी वा दुर्घटना स्वरूप घाइते हुन सक्छन् । उनीहरूले आफैले आफैलाई चोट पुऱ्याएका वा अरुबाट चोटपटक लागेको पनि हुनसक्छ ।

(अन्तरवार्ता लिनेलाई नोट: कृपया चोटपटक भनेको के हो ? उदाहरणसहित बुझाइदिनुहोस्-सडक दुर्घटनामा लागेको चोट, मोटरसाइकलले हानेको, लड्नु, आगोले पोल्नु, हड्डी भाँच्चिनु, खुट्टा मर्किनु, करेन्ट लाग्नु, घाउचोट लाग्नु, कुट्नु, पानीमा डुब्नु वा झण्डै डुब्नु, विष खानु, छाला रसायन वा एसिड पर्नु, आदि)

प्रश्न नं	प्रश्न	प्रतिक्रिया	कोड	स्किप
११६	गत ५ वर्ष (२०६८ देखि २०७३ मंसिरसम्म) मा यस घरमा बसोबास गर्ने कुनै सदस्यको चोटपटकको कारणले मृत्यु भएको छ ?	छ छैन भन्न नचाहेको	१ २ ३	१२३
तपाईंको परिवारको सदस्य गुमाउनु भएकोमा म ज्यादै दुःखी छु । अबका प्रश्नहरू भने तपाईंको परिवारमा मृत्यु भएका सदस्यहरूको बारेमा छन् ।				
११७	यदि तपाईंको परिवारको कुनै सदस्यको मृत्यु भएको हो भने गत ५ वर्षमा कतिजना सदस्यहरूको मृत्यु भएको थियो ?	<input type="text"/> <input type="text"/>		
	तलका प्रश्नहरू गत ५ वर्षमा चोटपटकको कारणले मृत्यु भएका सबै सदस्यहरूको लागि सोध्नुहोस् ।	I	II	III
११८	उक्त चोटपटक (जसको कारणले मृत्यु भएको) कसरी लागेको थियो ? ट्राफिक दुर्घटना ..... ०१ लडेको/खसेको ..... ०२ कुनै मान्छे वा वस्तुले प्रहार गरेको..... ०३ चक्कु वा धारिलो वस्तुले प्रहार वा काटेको गरेका ..... ०४ गोली लागेको ..... ०५ आगो वा तातो वस्तुले पोलेको ..... ०६ डुबेको ..... ०७ विष खाएको ..... ०८ जनावरले टोकेको वा आक्रमण गरेको ..... ०९ करेन्ट लागेको..... १० अन्य (खुलाउनुहोस्)..... १६ थाहा छैन ..... १८ भन्न नचाहेको..... १९	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
११८ क	के उहाँको मृत्यु वि.सं २०७२ साल, वैशाखको भुक्तम्पमा लागेको चोटको कारण भएको हो ? हो ..... ०१ होइन ..... ०२ थाहा छैन ..... १८ भन्न नचाहेको..... १९ (यदि “हो” भने प्र.नं.१२० म जाने)	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	
११९	उक्त चोट कसरी लागेको थियो ? दुर्घटनावश भएको ..... ०१ कसैले जानाजानी चोट लगाईदिएको..... ०२ उनीहरू आफैले जानाजानी चोट लगाएको. ०३ थाहा छैन ..... १८ भन्न नचाहेको..... १९	<input type="text"/>	<input type="text"/>	<input type="text"/>

प्रश्न नं	प्रश्न	प्रतिक्रिया	कोड	स्किप
१२०	के तपाईंलाई उहाँको चोट लाग्दा उँहाको पूरा उमेर कति थियो थाहा छ ? (यदि थाहा छैन भने प्र.नं.१२१ म जाने)	छ ..... १ थाहा छैन.....९८ भन्न नचाहेका..९९	छ ..... १ थाहा छैन.....९८ भन्न नचाहेका..९९	छ ..... १ थाहा छैन.....९८ भन्न नचाहेका..९९
१२०क)	उक्त चोट लाग्दा उहाँको उमेर कति थियो ? (पूरा भएको उमेर वर्षमा लेख्नुहोस्; यदि ५ वर्ष वा सोभन्दा कम उमेरको भए उमेर वर्ष र महिनामा लेख्नुहोस्)	<div><input type="text"/><input type="text"/> वर्ष</div> <div><input type="text"/><input type="text"/> महिना</div>	<div><input type="text"/><input type="text"/> वर्ष</div> <div><input type="text"/><input type="text"/> महिना</div>	<div><input type="text"/><input type="text"/> वर्ष</div> <div><input type="text"/><input type="text"/> महिना</div>
१२१	उहाँको मृत्यु कहाँ भएको थियो ? चोट लागेको स्थलमा ..... स्वास्थ्य संस्थामा (अस्पताल, क्लिनिक आदि)..... घरमा (यदि घरमा चोट लागेको होईन भने) ..... अन्य (खुलाउनुहोस्)..... थाहा छैन..... भन्न नचाहेको.....	१ २ ३ ९६ ९८ ९९	<div><input type="text"/></div>	<div><input type="text"/></div>
१२२	चोट पटक लागेको कति समयपछि उहाँको मृत्यु भएको थियो ? चोट लाग्ने बित्तिकै..... चोट लागेको १ घण्टाभित्र..... चोट लागेको १ देखि ६ घण्टाभित्र..... चोट लागेको ६ घण्टाभन्दा बढी तर १२ घण्टाभन्दा कम..... चोट लागेको १२ देखि २४ घण्टाभित्र..... चोट लागेको १ दिनभन्दा बढी तर १ हप्ताभन्दा कम..... चोट लागेको १ हप्ताभन्दा बढी..... अन्य (खुलाउनुहोस्)..... थाहा छैन..... भन्न नचाहेको.....	०१ ०२ ०३ ०४ ०५ ०६ ०७ ९६ ९८ ९९	<div><input type="text"/><input type="text"/></div>	<div><input type="text"/><input type="text"/></div>

### क.४ घरधूरी सुची र चोटपटक छानबिन

अबका प्रश्नहरु तपाईंको घरमा चोटपटक लागेका सदस्यहरुका लागि हो ।

प्रश्न नं	प्रश्न	प्रतिक्रिया	कोड	स्किप
१२३ ग	तपाईंको घरमा हिजो राति कतिजना सदस्यहरु बास बस्नु भएको थियो ?	<input type="text"/> <input type="text"/>		

कृपया घरमूलीको सहयोग लिएर घरधूरीमा भएका हाल यहीं बसोबास गर्ने सम्पूर्ण सदस्यको (अघिल्लो रात त्यस घरमा बिताएको) विवरण तलको तालिकामा लिनुहोस् र २०७२ बैशाखको भुकम्प र पछि उक्त सदस्यलाई कति पटक चोटपटक लागेको थियो गनेर लेख्नुहोस् ।

(नोट: यदि त्यस घरमा हिजोको रात पाहुना वा अन्य नातेदार बसेको भए त्यस सदस्य ६ महिनादेखि बस्दै आएको र एउटै भान्सा प्रयोग गरेको हुनुपर्ने र यदि त्यसै घरको स्थायी सदस्य गत ६ महिनादेखि घरमा नबसेको तर अर्न्तवार्ताको अघिल्लो रात त्यस घरमा बास बसेको भए उक्त सदस्यलाई पनि हाम्रो अध्ययनमा समावेश गराउने।)

(अन्तरवार्ता लिनेलाई नोट: आवश्यक परेमा कृपया चोटपटक भनेको के हो ? उदाहरणसहित बुझाइदिनुहोस्-सडक दुर्घटनामा लागेको चोट, मोटरसाइकलले हानेको, लड्नु, आगोले पोल्नु, हड्डी भाँच्नु, खुट्टा मर्किनु, करेन्ट लाग्नु, घाउचोट लाग्नु, कुट्नु, पानीमा डुब्नु वा झण्डै डुब्नु, विष खानु, छाला रसायन वा एसिड पर्नु, आदि)

१२३ ग -

क्र.सं.	नम	घरमूलीसँगको नाता	पूरा उमेर (वर्षमा) यदि उमेर ५ वर्षभन्दा कम भएमा वर्ष र महिनामा लेख्नुहोस्	लिंग १: पुरुष २: महिला ३: तेस्रो लिङ्ग	उक्त सदस्यलाई वैशाख १२ गतेको भूकम्पमा र त्यसपछि चोटपटक लागेको थियो ? (उपचार गर्नुपर्ने गरी वा एक वा बढी दिनको लागि 'सामान्य' गतिविधि परिवर्तन गर्नुपर्ने गरी गम्भिर घाइते भएको)	गत ५ वर्षमा उक्त सदस्यलाई अपाङ्ग हुनेगरी गहिरो चोटपटक लागेको थियो??  १: थियो २: थिएन ३: थाहा छैन  यदि “थिएन” वा “थाहा छैन” भने अर्को सदस्यमा जानुहोस्
	१२३ ग-१	१२३ ग-२	१२३ ग-३	१२३ ग-४	१२३ ग-५	१२३ ग-६
१		<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
२		<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
३		<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
४		<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
५		<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
६		<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
७		<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
८		<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

<u>कोडहरू:</u> २) घरमूलीसँग नाता ०१: घरमूली आफै ०२: श्रीमान्/श्रीमती ०३: छोरा/छोरी ०४: बुहारी ०५: नाति/नातिनी	०६: आमा/बुवा ०७: सासू/ससुरा ०८: दाई/भाइ/बहिनी/दिदि ०९: अन्य नातेदार/पाहुना	<u>५. चोटपटक:</u> १: थियो २: थिएन ९८: थाहा छैन	
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यदि तपाईंको घरमा कुनै पनि सदस्यलाई २०७२ साल वैशाख १२ गतेको भूकम्प वा पछि चोटपटक नलागेको भएमा अर्न्तवार्ता अन्त्य गर्नुहोस् ।  
 हरेक चोटपटक लागेको सदस्यको लागि छुट्टाछुट्टै समूह ख भर्नुहोस् ।

### समूह ख : चोटपटक मोडुल

यो प्रश्नहरु चोटपटकबाट पिडित व्यक्तिलाई सोध्नुहोस् (यदि चोटपटक लागेको व्यक्तिको उमेर १८ वर्षभन्दा माथि छ र उत्तर दिन सक्छ भने मात्र) अथवा आमा, हेरचाह गर्ने व्यक्ति वा घरमूली/जानकार व्यक्ति (यदि चोटपटक लागेको व्यक्तिको उमेर १८ वर्षभन्दा कम छ वा उत्तर दिन सक्दैन भने मात्र)

अब म तपाइलाई चोटपटकको बारेमा केही प्रश्नहरु सोध्न गइरहेको छु ।

प्रश्न नं	प्रश्न	प्रतिक्रिया	कोड	निर्देशन
जाँच १	चोटपटक लागेको व्यक्ति घरधुरी रोस्टरमा दर्ता भए नभएको सुनिश्चित गर्नुहोस् । घरधुरी रोस्टरबाट क्रम संख्या तान्नुहोस्	<input type="text"/> <input type="text"/>		
जाँच २	शारीरिक चोटपटकको प्रकार (बहुउत्तरको सम्भावना)  नोट: कुनै व्यक्तिलाई एक भन्दा बढी पटक चोट लाग्ने घटना भएको हुन सक्छ, ती मध्ये सबै भन्दा बढी असर गरेको चोटको घटनालाई छनौट गर्नुहोस् र त्यसमा भएको चोटपटकहरु छान्नुहोस् ।	हाडडी भाँचेको ..... मर्केको/जोर्नी फुस्केको ..... काटेको, टोकेको वा अन्य घाँउ ..... घिस्रेर लागेको घाँउ ..... जलन ..... विष खाएको ..... मस्तिष्क आघात/टाउकोमा चोट ..... आन्तरिक अङ्गमा चोट लागेको ..... निसासिएको ..... अन्य (खुलाउनुहोस्) ..... थाहा छैन ..... भन्न नचाहेको .....	०१ ०२ ०३ ०४ ०५ ०६ ०७ ०८ ०९ १० ११ १२	
जाँच ३	सहभागी	चोटपटक पिडित व्यक्ति..... चोटपटक पिडित व्यक्तिको तर्फबाट उत्तर दिने अन्य व्यक्ति (खुलाउनुहोस्) .....	१ २	
<b>समूह ख १. चोटपटकको बारेमा जानकारी</b>				
२०१	चोटपटक लाग्ने बेलामा पिडित व्यक्तिको उमेर कति थियो ? (पूरा वर्ष लेख्नुहोस् र यदि त्यो व्यक्ति ५ वर्ष मुनिको छ भने पूरा महिना लेख्नुहोस्)	<input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> वर्ष महिना		
२०३	चोटपटक लागेको व्यक्तिको वा तपाइँको अहिलेको पेशा के हो ?	कृषि क्षेत्रमा दैनिक ज्यालादारी वा ठेक्का वा करारमा काम ..... गैर कृषि क्षेत्रमा दैनिक ज्यालादारी वा ठेक्का वा करारमा काम ..... स्वरोजगार (कृषि क्षेत्रमा) ..... स्वरोजगार (गैर कृषि क्षेत्रमा) ..... लामो अवधिको लागि ज्यालादारीमा काम (कृषि क्षेत्रमा) ..... लामो अवधिको लागि ज्यालादारीमा काम (गैर कृषि क्षेत्रमा) ..... विद्यार्थी ..... गृहणी ..... गैरभूक्तानी काम/स्वयंसेवक ..... सेवानिवृत्त (Retired भएको) ..... बेरोजगार (काम गर्न सक्ने) ..... बेरोजगार (काम गर्न नसक्ने) .....	०१ ०२ ०३ ०४ ०५ ०६ ०७ ०८ ०९ १० ११ १२	

प्रश्न नं	प्रश्न	प्रतिक्रिया	कोड	निर्देशन
		अन्य (खुलाउनुहोस्)..... थाहा छैन ..... भन्न नचाहेको .....	९६ ९८ ९९	
२०४	चोटपटक कुन मितिमा लागेको थियो ?	<input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> महिना            वर्ष थाहा छैन .....	९८	
२०५	चोटपटक कुन समयमा लागेको थियो ?	बिहान (०५:०० देखि ११:००) ..... दिउँसो (११:०० देखि १३:००) ..... अपराह्न (१३:०० देखि १७:००) ..... साँझ (१७:०० देखि १९:००) ..... राती (१९:०० देखि ०५:००) ..... थाहा छैन ..... भन्न नचाहेको .....	१ २ ३ ४ ५ ९८ ९९	
२०६	चोटपटक लागेको बेलामा घाईते व्यक्ति/तपाईं कहाँ हुनुहुन्थ्यो ?	घरमा ..... विद्यालयमा ..... सडकमा ..... बसोबास/आवासीय संस्थानमा ..... खेलकुद क्षेत्र/मैदानमा ..... औद्योगिक वा निर्माण क्षेत्रमा ..... घरबाहिर खेतमा ..... व्यावसायिक क्षेत्रमा (पसल, स्टोर, होटेल, बार, कार्यालय)..... गाउँमा ..... धार्मिक स्थलमा ..... अन्य (खुलाउनुहोस्) ..... थाहा छैन ..... भन्न नचाहेको .....	०१ ०२ ०३ ०४ ०५ ०६ ०७ ०८ ०९ १० ९६ ९८ ९९	
२०७	चोटपटक लागेको बेलामा घाईते व्यक्ति/ तपाईं के गरिरहनुभएको थियो ?	भुक्तानी पाउने किसिमको काम (काममा आउने जाने क्रममा) ..... भुक्तानी नपाउने किसिमको काम (काममा आउने जाने क्रममा) ..... शिक्षा ..... खेलकुद ..... फुर्सदको समय ..... सुतिरहेको ..... धार्मिक कार्य ..... अन्य महत्वपूर्ण कार्य (खाने, पिउने, लुगा धुने) ..... यात्रा ..... उल्लेखनीय केही कार्य नगरिरहेको.... अन्य (खुलाउनुहोस्) ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	०१ ०२ ०३ ०४ ०५ ०६ ०७ ०८ ०९ १० ९६ ९८ ९९	

प्रश्न नं	प्रश्न	प्रतिक्रिया	कोड	निर्देशन
२०८	उहाँलाई चोटपटक कसरी लागेको थियो ?	सडक दुर्घटना ..... लडेर ..... कुनै मान्छे हानेर वा कुनै वस्तुले लागेर. छुरा प्रहारबाट ..... गोली लागेर ..... आगो, ज्वला वा तापले ..... डुबेको वा डुब्न लागेको ..... विषाक्त शरीरभित्र छिरेर ..... जनावरले टोकेर ..... विद्युतीय झटका लागेर..... अन्य (खुलाउनुहोस्)..... थाहा छैन ..... उत्तर दिन नचाहेको .....	०१ ०२ ०३ ०४ ०५ ०६ ०७ ०८ ०९ १० १६ १८ १९	
२०८-१	के यो चोटपटक २०७२ साल, वैशाखको भूकम्पका कारण भएको हो ?	हो ..... होइन ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	१→ २ १८ १९	यदि “१” आएमा प्र.नं २१० मा जाने
२०९	यो चोटपटक कसरी भएको थियो ? के त्यो दुर्घटना थियो कि कसैले घाइते बनाएको थियो वा घाइते व्यक्ति/तपाईं आफैँ जानीजानी घाइते भएको थियो ?	दुर्घटना (अन्जानमा) ..... कसैले जानीजानी गरेको (नियतवश)... आफैँले जानीजानी गरेको (स्वदण्डित).. थाहा छैन ..... उत्तर दिन नचाहेको .....	०१ ०२ ०३ १८ १९	
२१०	के घटना घट्नु अगाडिको ६ घण्टाभित्रमा चोटपटक लागेको व्यक्ति/ तपाईंले मादक पदार्थ (एकचोटी मात्र किन नहोस्) सेवन गर्नुभएको थियो ? १६ वर्षभन्दा मुनीको बालबालिकालाई सोध्दाखेरी बिचार पुर्याउनुहोस्	थियो ..... थिएन..... थाहा छैन ..... उत्तर दिन नचाहेको .....	१ २ १८ १९	
<b>ख २ : जलनबाट भएको घाइते (यदि जाँच २=०५ (जलन) हो भने प्रश्न नं. २११ बाट शुरु गर्नुहोस् नत्र प्रश्न नं. २२४ मा जानुहोस्</b>				
२११	यो चोट लाग्नमा योगदान गर्ने प्रमुख घटना वा कृयाकलाप के थियो ?	खाना/पानी तताई रहेको/चिया पकाईरहेको ..... कोठा वा शरीर तताइरहेको..... विद्युतीय काम गर्दा..... बत्तीको काम गर्दा..... ईन्धन जाँच गरिरहेको..... रक्सी उत्पादन..... फोहोर जलाइरहेको..... धुम्रपान गरिरहेको..... नुहाइरहेको/कपडा धोइरहेको..... अर्को व्यक्तिलाई जलनबाट बचाइरहेको... सवारी दुर्घटना..... घरमा आगो लागेर..... उत्तर दिन नचाहेको ..... अन्य (खुलाउनुहोस्).....	०१ } ०२ } ०३ → ०४ } ०५ } ०६ } ०७ } ०८ } ०९ } १० } ११ } १२ } १९ } १६ }	प्रश्न नं. २१२ मा जानुहोस् प्रश्न नं. २१३ मा जानुहोस् प्रश्न नं. २१४ मा जानुहोस् प्रश्न नं. २१४ मा जानुहोस्



प्रश्न नं	प्रश्न	प्रतिक्रिया	कोड	निर्देशन
		थाहा छैन.....	९८	
२१२	स्टोभ/चुल्हो कति उचाइमा थियो ? उचाई मापन गर्न ०.९ मिटरको लठी प्रयोग गर्नुहोस् ।	जमिनमा..... जमिनको सतहबाट ०.९ मिटरभन्दा कम जमिनको सतहबाट ०.९ मिटरभन्दा बढी ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	०१ ०२ ०३ ९८ ९९	प्रश्न न. २१४ मा जानुहोस्
२१३	के मर्मत गरिदै थियो ? (यो प्रश्न प्र.नं २११ मा ३ आए मात्र सोध्नुहोस्)	(खुलाउनुहोस्) ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	९८ ९९	
२१४	के आगो आकस्मिक रुपमा लागेर जलन भएको थियो ? (उदाहरणको लागि लड्नु, पोखिनु, कपडा वा कपाल आगोमा लाग्नु, आगो वा तातो वस्तु नजिक आउनु, आदि)	थियो ..... थिएन् ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	१ २ ९८ ९९	
२१५	के जल्लुको कारण उपकरणमा आएको खराबी थियो ? (उदाहरणको लागि ग्याँस चुहिनु, मट्टितेल चुल्हो पड्किनु, आगो नियन्त्रण बाहिर जानु, आदि)	थियो (खुलाउनुहोस्) ..... थिएन् ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	१ २ ९८ ९९	
२१६	के कुनै जोखिमपूर्ण वा असुरक्षित कार्य गरिरहेको कारण आगो लागेको थियो ? (जस्तै : घरका विद्युतीय काम गरेको, चुल्हो बलिरहेको समयमा चुल्होमा ईन्धन हालेको, आदि)	थियो (खुलाउनुहोस्) ..... ..... थिएन् ..... थाहा छैन ..... उत्तर दिन नचाहेका .....	१ २ ९८ ९९	
२१७	के जल्लुको कारण व्यक्तिको कपडाको थियो ?	थियो ..... थिएन् ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	१ २ ९८ ९९	
२१८	के जल्लुको कुनै मेडिकल कारण थियो ?	थियो ..... थिएन् ..... थाहा छैन ..... उत्तर दिन नचाहेका .....	१ २ ९८ ९९	प्रश्न न. २२० मा जानुहोस् ।
२१९	यदि कुनै मेडिकल कारण थियो भने कुन कारण थियो ?	औषधीको प्रतिक्रिया समयको असर .... चोटपटक लाग्नु ६ घण्टाभित्र रक्सी सेवन गरेको ..... चोटपटक ला ६ घण्टाभित्र लागूपदार्थ सेवन गरेको ..... छारेरोग ..... मानसिक समस्या/तनाव ..... शारीरिक असक्षमता ..... मनोभ्रम वा मानसिक असक्षमता ..... अन्य (खुलाउनुहोस्) ..... थाहा छैन ..... उत्तर दिन नचाहेका .....	०१ ०२ ०३ ०४ ०५ ०६ ०७ ९६ ९८ ९९	

प्रश्न नं	प्रश्न	प्रतिक्रिया	कोड	निर्देशन
२२०	यदि जलन घरभित्र भएको थियो भने घरको कुन भागमा (ठाउँ) भएको थियो ? घरमा भएको जलनको लागि मात्र सोध्नुहोस् यकिन गर्न प्रश्न न. २०६ मा जानुहोस् ।	भान्साकोठा ..... सुत्ने/बस्ने कोठा ..... आँगन (घरबाहिरको क्षेत्र) ..... भवन भित्रको गल्ली ..... नुहाउनेकोठा/लुगाधुने ठाउँ ..... लागू नहुने ..... अन्य (खुलाउनुहोस्) ..... थाहा छैन/याद गर्न नसकिएको ..... उत्तर दिन नचाहेको .....	०१ ०२ ०३ ०४ ०५ ८८ ९६ ९८ ९९	
२२१	यदि जलन भुक्तानी आउने काम गरिरहेको बेलामा भएको भए कस्तो प्रकारको कृयाकलापले गर्दा भएको थियो ? कार्यक्षेत्रमा भएको जलनको लागि मात्र सोध्नुहोस् । यकिन गर्न प्रश्न न. २०७ मा “१” छनोट भएको हुनुपर्ने ।	खाना पकाईरहेको ..... पेट्रोकेमिकल ..... कपडाको काम ..... निर्माण कार्य ..... खेती/किसनी ..... आगोसँग सम्बन्धित कार्य ..... विद्युतिय आपूर्ति कम्पनी ..... सामान्य उद्योग ..... लागू नहुने ..... अन्य (खुलाउनुहोस्) ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	१ २ ३ ४ ५ ६ ७ ८ ८८ ९६ ९८ ९९	
२२२	जलनको प्रमुख कारण के थियो ?	आगो/ज्वला..... तातो तरल पदार्थ वा वाफ वा अन्य ग्याँस..... तातो ठोस वस्तुसित सम्पर्कमा आउनु (जस्तै, भाँडो, इन्जिन, चुल्हो) ..... जलिरहेको वस्तुको धुवाँ सास लिएर.... विद्युतीय जलन ..... अत्यधिक प्रकाश वा तापबाट भएको जलन..... घर्षण जलन..... रसायनिक जलन ..... अन्य (खुलाउनुहोस्) ..... थाहा छैन/याद गर्न नसकिएको ..... उत्तर दिन नचाहेका .....	०१ ०२ ०३ ०४ ०५ ०६ ०७ ०८ ९६ ९८ ९९	प्रश्न नं २२३ मा जानुहोस् प्रश्न न. २२४ मा जानुहोस् प्रश्न न. २२२-१ मा जानुहोस् प्रश्न न. २२४ मा जानुहोस्
२२२-१	यदि जलन रसायनका कारण भएको हो भने, रसायन कहाँ राखिएको थियो ?	(खुलाउनुहोस्) ..... थाहा छैन .....	९८	प्रश्न न. २२४ मा जानुहोस्

प्रश्न नं	प्रश्न	प्रतिक्रिया	कोड	निर्देशन
२२३	यदि जलन आगो वा प्रकाशको कारणले भएको थियो भने त्यसको मुख्य स्रोत के थियो ?	काठ, गोबर, घाँसपात, पराल, खर ..... कोइला, लिंगनाइट, ब्रिकेट..... मट्टितेल ..... एल.पि.जी ..... बायोग्याँस ..... डिजेल, पेट्रोल ..... मैनवत्ती ..... चुरोट/सलाई ..... चट्याङ्ग ..... अन्य (खुलाउनुहोस्) ..... थाहा छैन/याद छैन ..... उत्तर दिन नचाहेको .....	०१ ०२ ०३ ०४ ०५ ०६ ०७ ०८ ०९ १० ११ १२	
<b>ख ३ : चोटपटकको उपचार</b>				
२२४	के घाइते भएको व्यक्ति/तपाईंलाई कसैले प्राथमिक उपचार गरेर सहयोग गर्ने प्रयास गरेको थियो ?	थियो ..... थिएन ..... थाहा छैन/याद छैन ..... उत्तर दिन नचाहेको .....	१ २ ९८ ९९	प्रश्न न. २२६ मा जानुहोस्
२२५	घाइते व्यक्ति/तपाईंलाई कसले प्राथमिक उपचार दिएको थियो ?  (बहुउत्तरको सम्भावना)	त्यहाँ उपस्थित मान्छेले ..... साथी/परिवार..... शिक्षक ..... पुलिस ..... आकस्मिक स्वास्थ्यकर्मी ..... डाक्टर ..... नर्स ..... दमकलको मान्छे ..... अन्य (खुलाउनुहोस्)..... थाहा छैन ..... उत्तर दिन नचाहेको.....	०१ ०२ ०३ ०४ ०५ ०६ ०७ ०८ ०९ १० ११ १२	
२२६	के घाइते भएको व्यक्ति/तपाईंलाई घरबाहिर औषधीउपचारको लागि लिएको थियो ? (जस्तै : स्वास्थ्य संस्था, अस्पताल, क्लिनिक)	थियो ..... थिएन ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	१ २ ९८ ९९	प्रश्न न. २३२ मा जानुहोस्
२२७	चोटपटक लागेको व्यक्ति/तपाईंलाई उपचार गर्नको लागि स्वास्थ्य संस्थासम्म कसरी लिएको थियो ?	हिडेर ..... निजी कारमा ..... ट्याक्सीमा ..... सार्वजनिक गाडीमा ..... एम्बुलेन्समा ..... साइकलमा ..... बैलगाडामा ..... हेलिकप्टर/हवाईजहाज ..... स्टेचर/डोको ..... थाहा छैन ..... उत्तर दिन नचाहेको ..... अन्य (खुलाउनुहोस्) .....	१ २ ३ ४ ५ ६ ७ ८ ९ १० ११ १२	

प्रश्न नं	प्रश्न	प्रतिक्रिया	कोड	निर्देशन
२२८	चोटपटक लागेको व्यक्ति / तपाईंलाई चोटपटक लागेपछि स्वास्थ्य संस्थासम्म पुर्याउन कति समय लागेको थियो ?	१ घण्टा भन्दा कम ..... १ देखि २ घण्टा ..... ३ देखि ६ घण्टा ..... ७ देखि ९ घण्टा ..... १० देखि १२ घण्टा ..... १३ देखि २४ घण्टा ..... २४ घण्टा भन्दा बढी ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	०१ ०२ ०३ ०४ ०५ ०६ ०७ १८ १९	
२२९	चोटपटक लागेको व्यक्ति / तपाईंलाई घाइते भएपछि घरबाट बाहिर औषधी उपचारको लागि सबैभन्दा पहिले कहाँ लिएको थियो ?	सरकारी अस्पताल ..... प्राथमिक स्वास्थ्य केन्द्र ..... स्वास्थ्य चौकी ..... उपस्वास्थ्य चौकी ..... गाउँघर क्लिनिक ..... घुम्ती क्लिनिक ..... आयुर्वेदसेन्टर ..... ADRA ..... नेपाल रेड क्रस ..... UMN ..... अन्य गैरसरकारी संस्था ..... निजी अस्पताल / क्लिनिक / नर्सिङ होम ..... फार्मसी ..... परम्परागत स्वास्थ्य संस्था ..... अन्य निजी (खुलाउनुहोस्) ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	०१ ०२ ०३ ०४ ०५ ०६ ०७ ०८ ०९ १० ११ १२ १३ १४ १५ १६ १८ १९	
२३०	के चोटपटक लागेको व्यक्ति / तपाईंलाई उपचारको लागि अस्पताल वा स्वास्थ्य संस्थामा भर्ना गरिएको थियो ?	थियो ..... थिएन ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	१ २ १८ १९	प्रश्न नं. २३२ जानुहोस्
२३१	चोटपटक लागेको व्यक्ति / तपाईंलाई उपचारको लागि अस्पताल वा स्वास्थ्य संस्थामा कति दिन भर्ना गरेको थियो ?	<input type="text"/> <input type="text"/> र <input type="text"/> <input type="text"/> महिना दिन थाहा छैन .....	१८	
<b>ख ४ : जलनको उपचार (जलन घाइतेको लागि मात्र, जाँच २=०५) यदि जलेको नभएमा प्र.नं २३७ मा जाने ।</b>				
२३२	के जलेको ठाउँमा चिसो पानीको प्रयोग गरिएको थियो ?	थियो ..... थिएन ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	१ २ १८ १९	प्रश्न नं. २३४ मा जानुहोस्
२३३	यदि प्रयोग गरिएको थियो भने, कति समयसम्म लगातार रूपमा पानीको प्रयोग गरिएको थियो ?	<input type="text"/> <input type="text"/> <input type="text"/> मिनेट थाहा छैन .....	१८	

प्रश्न नं	प्रश्न	प्रतिक्रिया	कोड	निर्देशन
२३४	के प्राथमिक उपचारको रुपमा अन्य घरेलु उपचार प्रयोग गरिएको थियो ?	थियो ..... (यदि थियो भने खुलाउनुहोस्) थिएन ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	१ २ ९८ ९९	
२३५	के चोटपटक लागेको व्यक्ति/तपाईंलाई स्वास्थ्य संस्थासम्म पुर्‍याउन उसको/ तपाईंको साथी वा नातेदारले सहयोग गरेको थियो ? (कुनै सेवा लिएको नलिएको एकिन गर्न प्रश्न न. २२९मा जानुहोस्)	थियो ..... थिएन ..... लागू नहुने ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	१ २ ८८ ९८ ९९	
२३६	घाईते व्यक्ति/तपाईं उपचारका लागि अस्पतालमा हुँदाखेरी उहाँ/तपाईंलाई कुनै शल्यक्रिया गरिएको थियो ? (घाईते भएको व्यक्ति स्वास्थ्य संस्थामा भर्ना भएको नभएको यकिन गर्ने प्रश्न न. २३० मा जानुहोस्)	थियो ..... थिएन ..... लागू नहुने (अस्पतालमा भर्ना नगरेको) ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	१ २ ८८ ९८ ९९	
<b>ख ५ : चोटपटकको असर</b>				
२३७	के चोटपटक लागेको व्यक्ति/तपाईंलाई दैनिक कार्यहरू गर्न चोटले एकदिन वा त्योभन्दा बढी दिनसम्म काम रोकिने गरी असर पारेको थियो ? (उदाहरणको लागि स्कुल जान, घरको काम गर्न, आदि)	थियो ..... थिएन ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	१ २ ९८ ९९	२४१
२३८	के चोटपटक लागेको व्यक्ति/ तपाईं चोटपटक लागेदेखि अहिलेसम्म सामान्य अवस्थामा फर्किनु भएको छ ?	पूरै फर्किएको छु ..... आंशिक रुपमा फर्किएको ..... फर्किएको छैन ..... थाहा छैन/याद छैन ..... उत्तर दिन नचाहेको .....	१ २ ३ ९८ ९९	२३८-१ २३८-२ प्र.नं २३९
२३८-१	यदि पूरै फर्किएको छ भने कति समयपछि ?	<input type="text"/> <input type="text"/> र <input type="text"/> <input type="text"/> महिना दिन थाहा छैन .....	९८	
२३८-२	यदि आंशिक रुपमा फर्किएको छ भने कति समयपछि ?	<input type="text"/> <input type="text"/> र <input type="text"/> <input type="text"/> महिना दिन थाहा छैन .....	९८	
२३९	के चोटपटक लागेको व्यक्ति/तपाईं चोटपटककै कारणले शारीरिक रुपमा अशक्त हुनुभएको थियो ? (चोटपटक लागेको ६ महिना भन्दा बढी हो वा होइन प्र.नं २०४ बाट यकिन गर्नुहोस्)	थियो ..... थिएन ..... चोटपटक लागेको ६ महिना भन्दा कम भएको ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	१ २ ८८ ९८ ९९	प्रश्न न. २४१ मा जानुहोस्।

प्रश्न नं	प्रश्न	प्रतिक्रिया	कोड	निर्देशन
२४०	चोटपटक लागेको व्यक्ति / तपाईंलाई चोटपटककै कारणले कस्ता प्रकारका शारीरिक अशक्तता भएको थियो ? (बहुउत्तरको सम्भावना)	हात-पाखुरा नचल्ने ..... हात पाखुरा चलाउन कठिनाई हुने... खुट्टा नचल्ने..... खुट्टा चलाउन कठिनाई हुने/खोच्चाएर हिँड्ने..... सुन्ने शक्ति हराएको..... दृष्टि हराएको..... कमजोरी वा श्वासप्रश्वासमा कठिनाई भएको ..... सम्झने क्षमतामा ह्रास ..... खानेकुरा चपाउन नसक्ने ..... अन्य (खुलाउनुहोस्) ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	०१ ०२ ०३ ०४ ०५ ०६ ०७ ०८ ०९ १६ १८ १९	
<b>ख ६ : चोटपटकको कारणले हुने आर्थिक असर</b>				
२४१	के चोटपटकको कारणले घाईते व्यक्तिले उसको काम (आम्दनीको श्रोत) गुमाउनु परेको थियो ?	थियो ..... थिएन ..... चोटपटक लागेको समयमा केहि काम नगरेको ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	१ २ ८८ ९८ ९९	
२४२	के घाईते व्यक्तिलाई हेरचाह गर्न तपाईंको घरको कसैले काम गर्न वा विद्यालय जान छाड्नुपरेको थियो ?	थियो ..... थिएन..... थाहा छैन..... उत्तर दिन नचाहेको .....	१ २ ९८ ९९	यदि “१” भए प्र.२४२-१ म जाने प्र.२४३ म जाने
२४२-१	यदि काम गर्न वा विद्यालय जान छाड्नुपरेको छ भने खुलाउनुहोस् ।	<input type="text"/> <input type="text"/> र <input type="text"/> <input type="text"/> महिना दिन थाहा छैन .....	९८	
२४३	के चोटपटकको कारणले तपाईंको घरको आम्दनी घटेको थियो? (आम्दनी मात्र, खर्च होइन)	थियो ..... थिएन ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	१ २ ९८ ९९	
२४४	के चोटपटकको कारणले तपाईंको घरको खाद्यान्नको उपभोग घटेको थियो ?	थियो ..... थिएन ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	१ २ ९८ ९९	
२४५	के घाईते व्यक्ति / तपाईंलाई हेरचाह गर्न तपाईंको घरले ऋण लिनुपरेको थियो ?	थियो ..... थिएन ..... थाहा छैन ..... उत्तर दिन नचाहेको .....	१ २ ९८ ९९	
२४६	के घाईते व्यक्तिलाई हेरचाह गर्न तपाईंको घरले कुनै अनुदानमा निर्भर हुनुपरेको थियो ?	थियो ..... थिएन..... थाहा छैन ..... उत्तर दिन नचाहेको .....	१ २ ९८ ९९	

प्रश्न नं	प्रश्न	प्रतिक्रिया	कोड	निर्देशन
२४७	के घाईते व्यक्ति / तपाईंलाई औषधि उपचारका निम्ति खर्च जुटाउन तपाईंको घरले केही सरसामानहरू / जमिन बेच्नुपरेको थियो ?	थियो ..... थिएन..... थाहा छैन..... उत्तर दिन नचाहेको.....	१ २ ९८ ९९	

*तपाईंको अमूल्य समय र जानकारीको लागि तपाईंलाई धेरै-धेरै धन्यवाद ।*

## B. Survey Questionnaire (English Version)



# Community - based Injury Survey with Burns Module – Pilot field test

## INTRODUCTION AND INFORMED CONSENT FORM<sup>1</sup>

My name is \_\_\_\_\_. I am here on behalf of HERD International. HERD International is a private company registered under Office of the Company Registrar, Ministry of Industry, Nepal to promote evidence informed policies and practices for sustainable development to improve quality of life. Presently, we are conducting this survey on injuries.

The main objective of this survey is to understand how big the problem of injuries is, how injuries may have affected your family, what causes them, and what kind of health care is needed. To get this information, we are carrying out household interviews in this community. The results from this project will be used to help agencies and officials decide on what needs to be done about the problem and assess whether health services to treat injured people are adequate.

This interview will take about 30 minutes of your time and I would ask the questions somewhere quiet and private.

What you or your family members tell me will be kept strictly confidential. This information will be kept securely and no one outside of this project will find out the answers that you or your family give me. During the course of the interview, I will record the answers down on the tablet so that no information gets lost but I will not ask your name so that none of this information can be traced back to you. The results will not be reported as individual cases, but only as overall results for the community.

You are free to stop the interview at any point, or to not answer any of the questions that we ask.

If you have any questions, please free to ask anytime.

Do you have any questions? Yes ☐ No ☐

Do you agree to participate in this interview? Yes .....1 [Proceed the Interview]

No.....2 [Stop the interview]

\_\_\_\_\_  
Signature of the respondent

\_\_\_\_\_  
Date

<sup>1</sup> The suggested model is included in Sethi D, Habibula S, McGee K et al. (editors) (2004) Appendix 6 Model Introduction and Consent Form. In *Guidelines for Conducting Community Surveys on Injuries and Violence* (p. 105), World Health Organization, Geneva. [http://www.who.int/violence\\_injury\\_prevention/publications/surveillance/06\\_09\\_2004/en/](http://www.who.int/violence_injury_prevention/publications/surveillance/06_09_2004/en/) (Accessed 19/07/2014).

Interviewer visits record	
Interview date	<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; width: 30px; height: 30px; margin-right: 5px;"></div> <div style="border: 1px solid black; width: 30px; height: 30px; margin-right: 5px;"></div> <div style="margin: 0 5px;">/</div> <div style="border: 1px solid black; width: 30px; height: 30px; margin-right: 5px;"></div> <div style="border: 1px solid black; width: 30px; height: 30px; margin-right: 5px;"></div> <div style="margin: 0 5px;">/2016</div> </div> <div style="display: flex; align-items: center; margin-top: 5px;"> <div style="margin-right: 10px;">DD</div> <div style="margin-right: 10px;">/</div> <div style="margin-right: 10px;">MM</div> <div>/ YYYY</div> </div>
Name of interviewer	.....
Signature of interviewer	.....
Interview result	Interview completed .....01 Told to give the interview next time .....02 Refuse to give interview .....03 Interview incomplete .....04 (Specify) ..... Others (Specify) .....05

### Section 1: Identification of Cluster/Household

Q.N.	Question	Response	Code	Skip
1	Name of District	.....		
2	Name of Municipality/VDC	.....		
3	Ward number	<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; width: 30px; height: 30px; margin-right: 5px;"></div> <div style="border: 1px solid black; width: 30px; height: 30px; margin-right: 5px;"></div> </div>		
4	Name of the household head	.....		
5	Sex of HH head	Male.....1 Female.....2		
6	Name of the Respondent	.....		
7	Age of the respondent	<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; width: 30px; height: 30px; margin-right: 5px;"></div> <div style="border: 1px solid black; width: 30px; height: 30px; margin-right: 5px;"></div> </div>		
8	Sex of the respondent	Male.....1 Female.....2		

## SECTION A: HOUSEHOLD MODULE

### Objectives:

- To describe household demographic characteristics
- To identify household burn injury hazards
- To estimate mortality rate due to injury in the community
- To estimate the incidence of injuries in the community [Key indicators: incidence of road traffic accident; falls; burns; poisonings]

*Respondent: Senior female or any knowledgeable person of the household 18 years of age or over.*

### A1. Household characteristics

*This part of questionnaire is an example only and should be adapted to the local context. Consideration should be given to including questions about assets which allow calculation of a wealth/poverty index.*

*"I am going to ask you about some household details."*

Q.N.	Question	Response	Code	Skip
101 Caste/ Ethnicity	What is your caste/ethnicity?	Hill Dalit..... Terai Dalit ..... Hill Janajati ..... Terai Janajati ..... Madhesi ..... Muslim ..... Brahmin/Chettri ..... Others(Specify) .....	01 02 03 04 05 06 07 96	
102_PPI1 Household size	How many household members are there?	Eight or more ..... Seven ..... Six ..... Five ..... Four ..... Three ..... One or two .....	01 02 03 04 05 06 07	
102_PPI2 Income source	In what type of job did the male head/spouse work the most hours in the past seven days?	No male head/spouse ..... Does not work, or paid wages on a daily basis or contract/piece-rate in agriculture .. Paid wages on a daily basis or contract/piece-rate in non-agriculture ..... Self-employed in agriculture ..... Self-employed in non-agriculture ..... Paid wages on a long-term basis in agriculture or nonagriculture .....	01 02 03 04 05 06	
102_PPI3 Bedrooms	How many bedrooms does your residence have?	None ..... One ..... Two ..... Three or more .....	01 02 03 04	

102_PPI4 Outside walls	Main construction material of outside walls?	Bamboo/leaves, unbaked bricks, wood, mud-bonded bricks/stones, or no outside walls ..... 01 Cement-bonded bricks/stones, or other material ..... 02 Others (specify) ..... 96	
102_PPI5 Roof material	Main material roof is made of?	Straw/thatch, or earth/mud ..... 01 Tiles/slate, or other ..... 02 Wood/planks, or galvanized iron ..... 03 Concrete/cement ..... 04 Others (specify) ..... 96	
102_PPI8 Toilet	What type of toilet is used by your household?	None ..... 01 household non-flush, or communal latrine ..... 02 Household flush ..... 03	
102_PPI9 Phones	How many telephone sets/cordless/mobile does your household own?	None ..... 01 One ..... 02 Two or more ..... 03	
102_PPI10 Land	Does your household own, sharecrop-in, or mortgage-in any agricultural land? If yes, is any of it irrigated?	No ..... 01 Yes, but none irrigated ..... 02 Yes, and some irrigated ..... 03	
103	Where is your family living since the earthquake?	Same house as before earthquake ..... 01 Reconstructed (new) house on same land ..... 02 Rented house on a different piece of land ..... 03 Institutional shelter ..... 04 Relative/friend's house ..... 05 Temporary shelter/tarpaulin ..... 06 Other (specify) ..... 96	

## A2. Household energy use and supplementary information

*"The next questions are about cooking and the types of fuel and energy sources you use in the home."*

Q.N.	Question	Response	Code	Skip
106_PPI7	What type of stove did your household mainly use for cooking?	Open fireplace, mud stove ..... 01 Kerosene stove ..... 02 Gas stove ..... 03 Improved cook stove ..... 04 No cooking at household ..... 05 Others (specify) ..... 96	→ 111	
107 Cooking fuel	What type of fuel does your household mainly use for cooking?	Electricity ..... 01 Solar ..... 02 LPG /cooking gas..... 03 Biogas ..... 04 Kerosene ..... 05 Charcoal ..... 06 Coal ..... 07 Wood/firewood..... 08 Animal dung/waste..... 09 Crop residues/grass/straw/shrubs... 10 Other (specify)..... 96		
108 Other fuels for cooking	Does your household use anything else for cooking? If yes, what types of fuel? ( <b>circle all others used</b> )	Electricity ..... 01 Solar ..... 02 LPG /cooking gas..... 03 Biogas ..... 04 Kerosene ..... 05 Charcoal ..... 06 Coal/lignite ..... 07 Wood/firewood..... 08 Animal dung/waste..... 09 Crop residues/grass/straw/shrubs... 10 Other (specify) ..... 96		
109 Cooking location	Where is cooking usually performed?	Inside the house ..... 01 In a separate building ..... 02 Outdoors ..... 03 Other (Specify) ..... 04	→ If 3 skip to 111	
110_PPI6 Separate kitchen	Do you have a separate room which is used as a kitchen?	Yes ..... 01 No ..... 02		
111 Source of light	What is the main source of light at your house in the evening? ( <b>select one only</b> )	No lighting ..... 01 Electricity ..... 02 Solar home system..... 03 Generator ..... 04 Solar Lantern ..... 05 Battery flashlight, torch ..... 06 Gas lamp ..... 07		

		Kerosene Lamp ..... 08 Oil lamp ..... 09 Candle ..... 10 Other (specify) ..... 96	
<b>112</b> Water heating	What does your household mainly use for heating water for bathing when needed? <b>(select one only)</b>	Water not heated ..... 01 Solar water heater ..... 02 Electric water heater ..... 03 LPG water heater(Geyser) ..... 04 Cookstove (used to heat water) ..... 05 Other (specify) ..... 96	If 04 go to 113, if not skip to 114
<b>113</b> Gas geyser location	Is the gas geyser located inside the bathroom? <b>(enumerator to observe)</b>	Yes ..... 01 No ..... 02	
<b>114</b> Home heating methods	What does your household mainly use for space heating when needed? <b>(select one only)</b>	No heating ..... 01 Electric heater ..... 02 Gas space heater ..... 03 Kerosene heater ..... 04 Coal or lignite ..... 05 Charcoal ..... 06 Wood/firewood ..... 07 Processed biomass (pellets) or woodchips/ briquette ..... 08 Other (specify) ..... 96	If 01-04 skip to A2_S1
<b>115</b> Space heater	Tell me about the space heater. (Refer to Q 114 to complete this question) Is it:		
<b>115a</b>	Traditional/open fire or manufactured?	Traditional/open fire ..... 01 Manufactured ..... 02	
<b>115b</b>	With a chimney, flue or vent?	Yes ..... 01 No ..... 02	
<b>115c</b>	With a fan?	Yes ..... 01 No ..... 02	

A2. Supplementary information			
<b>A2_S1</b>  Burn first aid	What is the best first aid for someone who has just been burned by heat or fire?	(Free text)..... ..... ..... ..... Don't know..... 98 Refused..... 99	

### A3. Injury-related deaths

*"People can be injured by accident or on purpose. They may have hurt themselves or others may have caused them to be hurt. These next questions are about injuries that have happened to people living in your house." (Note to interviewer: Please explain again what is meant by the word "injury". An injury is **any physical damage to the body such as a wound, bruise, burn, fracture, internal injury, poisoning, loss of consciousness due to a blow to the head, suffocation/strangulation**. Injuries can result from a falling building, a road traffic accident, a fall, fire or heat, electrocution, poisoning, drowning, gun shot, sharp instrument such as a knife or an animal bite, chemicals or acid on the skin, or toxic fumes.)*

Q.N.	Question	Response	Code	Skip
116 Injury deaths	Has anyone who normally lived in this household died from an injury in the last 5 years?	Yes.....01 No .....02 Refused.....03	01 02 } 03 }	123
I'm very sorry to hear that you lost a household member. The following questions are about this/these deceased person/s.				
117 Number of injury deaths	Could you please tell me how many members of your household died from an injury in the last 5 years?	<input type="text"/> <input type="text"/>		
	Ask the following questions for each member that has died from an injury in the last 5 years.	I	II	III
118 Nature of injury causing death (WHO 1.2.3)	What caused the injury that they died from? Traffic accident.....01 Fall.....02 Struck/hit by person or object.....03 Stab .....04 Gun shot .....05 Fire, flames or heat .....06 Drowning.....07 Poisoning .....08 Animal bite/attack.....09 Electrical shock .....10 Other (Specify).....96 Don't know .....98 Refused .....99	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
118a Earthquake	Did the death happen as a result of the earthquakes in April-May 2015? Yes.....01 No.....02 Don't know.....98 Refused.....99	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
119 Intent (WHO 1.2.4)	How did the injury happen? It was an accident (unintentional).....01 Someone else did it to them deliberately ..02 They did it to themselves deliberately.....03 Don't know.....98 Refused.....99	<input type="text"/>	<input type="text"/>	<input type="text"/>

<b>120</b> Age at death (WHO 1.6.1) <sup>2</sup>	Do you know the complete age of injured person when he/she was hurt?	Yes.....1 Don't know..98 Refused.....99	Yes.....1 Don't know..98 Refused.....99	Yes.....1 Don't know..98 Refused.....99
<b>120_a</b> Age at death (WHO 1.6.1) <sup>3</sup>	How old was the injured person when he/she was hurt? <i>(Record age in complete years; years and months if the person is 5 years or under)</i>	a) <input type="text"/> <input type="text"/> Years b) <input type="text"/> <input type="text"/> Months	<input type="text"/> <input type="text"/> Years <input type="text"/> <input type="text"/> Months	<input type="text"/> <input type="text"/> Years <input type="text"/> <input type="text"/> Months
<b>121</b> Place of death (WHO 1.6.2)	Where did the injured person die? <b>Multiple answers possible (e.g. 01 &amp; 03)</b> At the place where the injury occurred ..01 At a health facility (e.g. hospital, clinic, health centre).....02 At home .....03 Other (specify) .....96 Don't know.....98 Refused .....99	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>122</b> Time of death (WHO 1.6.3)	How long after the injury occurred did the injured person die? Immediately .....01 Less than 1 hour after the injury .....02 Between 1 and 6 hours after the injury ..03 More than 6 hours but less than 12 hours after the injury .....04 Between 12 & 24 hours after the injury .05 More than 1 day but less than 1 week after the injury .....06 More than 1 week after the injury .....07 Other (specify) .....96 Don't know.....98 Refused .....99	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>

<sup>2</sup> Reference to WHO survey question numbers are included where appropriate from Sethi D, Habibula S, McGee K et al. (editors) (2004) *Guidelines for Conducting Community Surveys on Injuries and Violence* (p. 105), World Health Organization, Geneva. [http://www.who.int/violence\\_injury\\_prevention/publications/surveillance/06\\_09\\_2004/en/](http://www.who.int/violence_injury_prevention/publications/surveillance/06_09_2004/en/) (Accessed 19/07/2014).

<sup>3</sup> Reference to WHO survey question numbers are included where appropriate from Sethi D, Habibula S, McGee K et al. (editors) (2004) *Guidelines for Conducting Community Surveys on Injuries and Violence* (p. 105), World Health Organization, Geneva. [http://www.who.int/violence\\_injury\\_prevention/publications/surveillance/06\\_09\\_2004/en/](http://www.who.int/violence_injury_prevention/publications/surveillance/06_09_2004/en/) (Accessed 19/07/2014).



#### A4: Household schedule and injury screening

123. These next questions are about injuries in the people now living in your household. (Note to interviewer: If necessary, explain again what is meant by the word "injury" if necessary and list some examples.)

Q.N.	Question	Response	Code	Skip
123_a	Was anyone in this household injured during the 2015 earthquakes or has anyone been injured any time since the earthquake? (Serious enough to need some kind of medical treatment or to change their 'normal' activity for one or more days. For example: did not go to work or school, could not carry out household chores; did not play/feed normally if they were a young child or baby.)	Yes..... No .....	01 02	
123_b	How many household members had stayed in your household last night?	<input type="text"/> <input type="text"/>		

**Note: If "No" response in both Q 123\_a and Q 123\_b then End the interview.**

We will start by listing all the people who stayed in your house last night [Complete columns 1 to 4]. Now we will go through the list, person by person. Can you tell me whether each person had an injury **serious enough to need some kind of medical treatment or to change their 'normal' activity for one or more days since the first earthquake (April 25, 2015) onwards?** (For example: did not go to work or school, could not carry out household chores; did not play/feed normally if they were a young child or baby).

**Q.N. 123\_c**

S.N	Name	Relationship with Respondent	Age (years) [Years & months if <5 years]	Sex 1: Male 2: Female 3: Third gender	Was he/she injured during the 2015 earthquakes or any time since? (Serious enough to need medical treatment or to change their 'normal' activity for one or more days?)  1: Yes 2: No 98: Don't know  If 'No' or 'don't know', skip to next household member
	(1)	(2)	(3)	(4)	(5)
01		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
02		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
03		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
04		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
05		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
06		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
07		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>

09		<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
10		<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
<b>2) Relationship</b> 01: Self 02: Spouse 03: Son / daughter 04: Daughter-in-law 05: Grandchild		06: Parent 07: Parent-in-law 08: Co-wife 09: Brother/Sister 10: Other relative/Guest 11: Not related/Guest			

*If no injury events in household members from the time of the earthquake onwards → End.*

*Please ensure to complete Section B for each person with ‘Yes’ (01) in Column 5.*

**SECTION B: INJURY MODULE** Complete Section B for the most serious injury event of each person with an injury (Q123\_c Column 5 = 'Yes' [01]).

Objectives:

- To explore the cause of injuries; in particular, burn injuries
- To explore risk factors for injuries; in particular, burn injuries
- To explore treatment and impact of injuries; in particular, burn injuries

Respondents:

1. Injury victim (if present at time of interview, current age  $\geq 18$  years and is able to understand and/or respond to the questions)
2. Another knowledgeable HH member (proxy) if victim < 18 years, is not present, or is unable to understand and/or respond to the questions

Q.N.	Question	Response	Code	Skip
<b>Check 1</b>	Ensure whether the injured person is recorded as injured in HH roster, column 5. Copy household serial number from HH roster.	<input type="text"/> <input type="text"/>		
<b>Check 2</b> Nature (WHO 1.2.5)	Nature of physical injury	Fracture (broken bone)..... 01 Sprain/Dislocation ..... 02 Cut, bite or other open wound ..... 03 Bruise or superficial injury ..... 04 Burn ..... 05 Poisoning ..... 06 Concussion/head injury ..... 07 Internal injury/internal organ injury..... 08 Suffocation..... 09 Other (Specify)..... 96 Don't know ..... 98 Refused..... 99		
<b>Check 3</b>	Respondent	Victim (injured person) ..... 01 Proxy ..... 02		
<b>B1. INJURY EVENT</b>				
<b>201</b> Age (WHO 1.1.2)	How old was the injured person when he/she was hurt? <b>(Record age in complete years; years and months if the person is 5 years or under)</b>	<input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> Years Months		
<b>202</b> Sex (WHO 1.1.3)	Is the injured person male or female?	Male ..... 01 Female ..... 02 Third gender..... 03		
<b>203</b> Occupation (WHO 1.1.5)	What is the injured person's current occupation?	Farmer ..... 01 Civil servant (Government employee)..... 02 Self-employed ..... 03 Street vendor ..... 04 Professional ..... 05 Student ..... 06 Homemaker ..... 07		

Q.N.	Question	Response	Code	Skip
		Non-paid worker/volunteer ..... 08 Retired ..... 09 Unemployed (able to work)..... 10 Unemployed (unable to work)..... 11 Other (specify) ..... 96 Don't know ..... 98 Refused ..... 99		
<b>204</b> Date of injury	On what date did the injury occur?	<input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> MM                      YYYY Don't know ..... 98		
<b>205</b> Time of injury	At what time did the injury occur?	Morning (05:00-11:00)..... 01 Middle of the day (11:00-1300)..... 02 Afternoon (13:00-17:00) ..... 03 Evening (17:00-19:00)..... 04 Night (19:00-05:00) ..... 05 Don't know ..... 98 Refused ..... 99		
<b>206</b> Place (Adapted from WHO 1.2.1)	Where was/ were the injured person/ you when the injury occurred?	Home ..... 01 School ..... 02 Street/highway ..... 03 Residential institution ..... 04 Sports and athletic area ..... 05 Industrial or construction ..... 06 Farm (excluding home) ..... 07 Commercial area (shop, store, hotel, bar, office) ..... 08 Countryside ..... 09 Religious place ..... 10 Other (specify) ..... 96 Don't know ..... 98 Refused ..... 99		
<b>207</b> Activity (Adapted from WHO 1.2.2)	What was/ were the injured person/ you doing when he/she/you was hurt?	Paid work (including travel to and from work) 01 Unpaid work (including household-related chores and travel to and from work) ..... 02 Education ..... 03 Sports ..... 04 Leisure ..... 05 Sleeping ..... 06 Religious practice ..... 07 Other vital activity (i.e. eating, drinking ..... 08 Travelling ..... 09 Unspecified activities (e.g. hanging around, doing nothing) ..... 10 Other (specify) ..... 96 Don't know ..... 98 Refused ..... 99		

<b>208</b> Mechanism (WHO 1.2.3)	How was/were the injured person/you hurt?	Traffic accident..... 01 Fall ..... 02 Struck/hit by person or object ..... 03 Stab..... 04 Gun shot ..... 05 Fire, flames or heat ..... 06 Drowning or near-drowning ..... 07 Poisoning ..... 08 Animal bite/attack ..... 09 Electrical shock ..... 10 Other (Specify) ..... 96 Don't know ..... 98 Refused..... 99	
<b>208a</b> Earthquake	Did the injury happen as a result of the earthquakes in April-May 2015?	Yes..... 01 No ..... 02 Don't know ..... 98 Refused..... 99	
<b>209</b> Intent (WHO 1.2.4)	How did the injury happen? Was it an accident, did someone do this to the injured person/you, or did the injured person/you do this to himself/herself/yourself?	It was an accident (unintentional) ..... 01 Someone else did it to me deliberately (intentional) ..... 02 I did it to myself deliberately (intentional)..... 03 Don't know ..... 98 Refused..... 99	
<b>210</b> Use of alcohol (WHO 1.2.6)	In the 6 hours before the injured person/you was/were hurt, did he/she/you have any alcohol to drink? (even one drink) <i>Use precautions while asking to children under 16 years of age.</i>	Yes..... 01 No ..... 02 Don't know/can't remember ..... 98 Refused..... 99	
<b>B2. BURN INJURY EVENT (If SECTION B Check 2 = 06 (Burn) proceed with 211, or else go to Q224</b>			
<b>211</b> Activity- burn injury	What was the main event or activity contributing to the burn injury?	Cooking..... 01 Heating/warming of rooms or body ..... 02 Repairing equipment or electrical wiring .... 03 Lighting ..... 04 Refueling/checking fuel ..... 05 Alcohol production..... 06 Burning of waste/bonfire..... 07 Smoking..... 08 Bathing/ washing ..... 09 Rescuing another person with burn injury... 10 Motor vehicle accident..... 11 Building fire ..... 12 Other (specify) ..... 96 Don't know ..... 98 Refused ..... 99	212 212 → 213  214  224

<b>212</b> Stove height	At what height was the fire or base of stove located? <i>Use 0.9m stick to help judge height</i>	At ground level ..... 01 Less than 0.9m from the ground..... 02 At least 0.9 m from the ground ..... 03 Don't know ..... 98	} 214
<b>213</b> Repair object	What was being repaired?	(Specify)..... Don't know ..... 98 Refused ..... 99	
<b>214</b> Accidental movement	Was an accidental movement involved in causing the burn (e.g. fall, spill, clothing or hair catching fire, getting too close to fire or hot object)?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	
<b>215</b> Equipment problem	Did an equipment problem contribute to the burn (e.g. gas leak, kerosene stove explosion, uncontrolled flames)?	Yes ..... 01 (Specify)..... No ..... 02 Don't know ..... 98 Refused ..... 99	
<b>216</b> Unsafe activity	Was a person doing something unsafe/risky when the burn happened (e.g. electrical repairs, mishandling a pressure cooker, refueling stove while stove alight, and mixing water in hot oil to check hotness of oil)?	Yes ..... 01 (Specify)..... No ..... 02 Don't know ..... 98 Refused ..... 99	
<b>217</b> Ignition of clothing	Did the person's clothing catch fire?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	
<b>218</b> Medical pre-disposition	Did a medical reason contribute to the burn injury happening?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	} 220

<b>219</b> Medical reason	What was the medical reason that contributed to the burn injury happening?	Prescription drugs influencing coordination or reaction time ..... 01 Alcohol taken within 6 hours of injury ..... 02 Illegal drugs taken within 6 hours of injury.... 03 Epilepsy ..... 04 Psychiatric or psychological disorder ..... 05 Physical disability ..... 06 Dementia or mental disability ..... 07 Other (specify) ..... 96 Don't know ..... 98 Refused ..... 99	
<b>220</b> Location in home	<b>Only for the burn injuries that happened in the home (refer to Q206)</b> If the burn happened at home, in which part of the house did the burn injury occur?	Kitchen ..... 01 Living rooms/sleeping places ..... 02 Yard (or area outside house) ..... 03 Corridor ..... 04 Bathroom (bathing/washing places) ..... 05 Not applicable..... 08 Other (specify) ..... 96 Don't know ..... 98 Refused caused by rubbing against a rough surface 99	
<b>221</b> Workplace activity	<b>Only for the burn injuries that happened in a workplace (refer to Q207). Includes cottage industries in the home.</b> If the burn injury happened at a workplace while undertaking paid work, what was the main type of activity at the workplace?	Food preparation ..... 01 Petrochemical ..... 02 Textiles ..... 03 Construction ..... 04 Agricultural /farm ..... 05 Fireworks / related ..... 06 Electricity supply company ..... 07 General industry ..... 08 Not applicable..... 09 Other (specify) ..... 96 Don't know ..... 98 Refused ..... 99	
<b>222</b> Primary cause of burn	What was the main cause of the burn?	Flames / fire ..... 01 Hot liquid, steam or other gas..... 02 Contact with a hot object or solid substance (e.g. cookstove, pot, engine) ..... 03 Inhalation of smoke ..... 04 Electrical burn ..... 05 Flash burn (intense heat or light) ..... 06 Friction burn ..... 07 Chemical burn ..... 08	224 222_a



		Other (specify) ..... 96 Don't know ..... 98 Refused ..... 99	} 224
<b>222_a</b>	If the burn was caused by chemical, where was chemical stored?	Specify ..... Don't know ..... 98	→ 224
<b>223</b> Fuel source-flame burn	If the burn was caused by flames /fire, what was the source of fuel?	Wood, dung, leaves, rubbish, straw, thatch ..... 01 Coal, charcoal, briquette ..... 02 Kerosene ..... 03 LPG..... 04 Biogas ..... 05 Diesel/petrol ..... 06 Candle ..... 07 Cigarettes /matches ..... 08 Lightning..... 09 Other (specify) ..... 96 Don't know ..... 98 Refused ..... 99	
<b>B3. INJURY TREATMENT</b>			
<b>224</b> First aid at scene (WHO 1.15.1)	Did anyone try to help the injured person/you by giving first aid?	Yes ..... 01 No ..... 02 Don't know/Can't remember ..... 98 Refused ..... 99	} 226
<b>225</b> Person who provided first aid (WHO 1.15.2)	Who gave first aid to the injured person/you?  <b>Multiple answers possible.</b>	Bystander..... 01 Friend/family ..... 02 Teacher..... 03 Police..... 04 Ambulance personnel/paramedics ..... 05 Doctor ..... 06 Nurse ..... 07 Fire brigade personnel ..... 08 Other (Specify) ..... 96 Don't know ..... 98 Refused ..... 99	
<b>226</b> Seeking medical care (WHO 1.4.1)	After he/she/you was injured, was medical attention/ treatment sought outside of the household (e.g. at a health facility, hospital, clinic)?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	} 232

<b>227</b> <b>Transport to health facility</b> (Adapted from WHO 1.15.3)	How did the injured person/you get to the health facility for treatment of his/her injuries?	By foot..... 01 By private car ..... 02 By taxi ..... 03 By public transport ..... 04 By ambulance ..... 05 By bicycle..... 06 By animal cart ..... 07 By helicopter/aeroplane..... 08 By stretcher/doko (basket)..... 09 Other (specify) ..... 96 Don't know ..... 98 Refused ..... 99	
<b>228</b> <b>Transport time</b> (WHO 1.15.4)	How long did it take for the injured person/you to get to the health facility from the time of injury?	Less than 1 hour ..... 01 1–2 hours ..... 02 3–6 hours ..... 03 7–9 hours ..... 04 10–12 hours ..... 05 13–24 hours ..... 06 More than 24 hours ..... 07 Don't know ..... 98 Refused ..... 99	
<b>229</b> <b>Place of medical care</b> (Adapted from WHO 1.4.2)	Where did the injured person/you first go for medical treatment for his/her injury?	<u><b>Govt. Service</b></u> Govt. Hospital ..... 01 PHC clinic ..... 02 Health post..... 03 Sub Health Post ..... 04 PHC outreach ..... 05 Mobile clinic ..... 06 <u><b>Non-Govt. Service</b></u> Ayurvedic centre ..... 07 ADRA..... 08 Nepal Red Cross..... 09 UMN..... 10 Other NGOs ..... 11 <u><b>Private medical sector</b></u> Private hospital/clinic/nursing home ..... 12 Pharmacy..... 13 Traditional health centre..... 14 Other (specify) ..... 96 Don't know ..... 98 Refused ..... 99	

<b>230</b> Admission to hospital/health facility (WHO 1.4.3)	Was/were the injured person/you admitted to a hospital ward or health facility for treatment of his/her/your injury?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	232
<b>231</b> Length of hospital stay (WHO 1.4.4)	How many days did the injured person/you stay in the hospital for treatment of his/her injury?	<input type="text"/> <input type="text"/> months and <input type="text"/> <input type="text"/> days  Don't know ..... 98	
<b>B4. BURN INJURY TREATMENT (If Check 2 = 06 (Burn) proceed with Q232, or else go to Q237)</b>			
<b>232</b>	Was cool, running water applied to the burned area for first aid?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	234
<b>233</b>	If cool, running water was applied to the burned area, for how long was this carried out (minutes)?	<input type="text"/> <input type="text"/> <input type="text"/> minutes Don't know ..... 98	
<b>234</b>	Was another home-based treatment used as first-aid?	Yes ..... 01 (Specify) ..... ..... No ..... 02 Don't know ..... 98 Refused ..... 99	
<b>235</b>	<b>Refer to Q229 if any sort of care was sought</b> Did a relative or friend accompany the person with the burn injury/you to the health facility?	Yes ..... 01 No ..... 02 Not applicable ..... 08 Don't know ..... 98 Refused ..... 99	
<b>236</b>	<b>Refer to Q230 if the injured person was admitted to the hospital</b> If the person with the burn injury /you was admitted to a hospital or health facility did they have any operations?	Yes ..... 01 No ..... 02 Not applicable ..... 08 Don't know ..... 98 Refused ..... 99	

B5. IMPACT OF INJURY – IMPAIRMENT AND DISABILITY			
<b>237</b> Effect on usual activities (WHO 1.5.1)	As a result of the injury, did the injured person/you suffer any impairment that prevented him/her from performing his/her usual activities (e.g. going to work or school, doing housework, playing etc.) for one or more days?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	
<b>238</b> Return to normal activity (WHO 1.5.2)	Since the injury occurred, has/have the injured person/you been able to return to his/her normal activities?	Yes, fully ..... 01 → Yes, but only partially ..... 02 → No ..... 03 Don't know ..... 98 Refused ..... 99	238a 238b
<b>238a</b>	If yes, fully, then after how long?	<input type="text"/> <input type="text"/> months & <input type="text"/> <input type="text"/> days	
<b>238b</b>	If yes, but only partially, then after how long?	<input type="text"/> <input type="text"/> months & <input type="text"/> <input type="text"/> days	
<b>239</b> Physical disability (WHO 1.3.1)	<b>If the injury happened more than 6 months ago</b> Did the injured person/you suffer a physical disability as a result of being injured?	Yes ..... 01 No ..... 02 Injury happened less than 6 months ago ..... 08 Don't know ..... 98 Refused ..... 99	241
<b>240</b> Nature of disability (Adapted from WHO 1.3.2)	In what ways was the injured person/you physically disabled?  <b>Multiple answers possible.</b>	Unable to use hand or arm ..... 01 Difficulty using hand or arm ..... 02 Unable to use legs ..... 03 Difficulty to use legs/Walk with a limp ..... 04 Loss of hearing ..... 05 Loss of vision ..... 06 Weakness or shortness of breath ..... 07 Inability to remember things ..... 08 Inability to chew food ..... 09 Other (specify) ..... 96 Don't know ..... 98 Refused ..... 99	
B6. ECONOMIC IMPACT OF INJURY			
<b>241</b> Loss of employment (WHO 1.5.3)	Did the injured person/you lose his/her job as a result of being injured?	Yes ..... 01 No ..... 02 Not working at time of injury ..... 08 Don't know ..... 98 Refused ..... 99	
<b>242</b> Loss of job - household member (Adapted from)	Did anyone in the household lose days of work or school to take care of the injured person/you?	Yes ..... 01 → No ..... 02 Don't know ..... 98 Refused ..... 99	242a

<b>WHO 1.16.3)</b>			
<b>242a</b>	If yes, then specify	<input type="text"/> <input type="text"/> months & <input type="text"/> <input type="text"/> day	
<b>243</b> Decline of household income (WHO 1.16.1)	Did the usual household income (money coming in, not expenditures) decline as a result of the injury event?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	
<b>244</b> Decline in food consumption (WHO 1.16.2)	Did the usual household food consumption decline as a result of the injury event?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	
<b>245</b> Loans to pay for medical treatment (WHO 1.16.4)	Did the household have to borrow money to take care of the injured person/you?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	
<b>246</b>	Did the household have to depend on charity to take care of the injured person/you?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	
<b>247</b> Selling possessions (WHO 1.16.5)	Did the household have to sell anything to pay for medical treatment for your/ the injured person or make up for loss of income?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	

*Thank you very much for your valuable time and information.*

## C. List of Logistics

Logistics for Field Researchers (20)				
Category	Items		Total Qty Required	Qty: Per person
<b>Non-consumable</b>	Bag	Refundable	20	1
	HERD Jacket	Refundable	20	1
	Sleeping Bag	Refundable	20	1
	Umbrella	Refundable	20	1
	Raincoat	Refundable	20	1
	Torch	Refundable	20	1
	Battery (pair)	Refundable	20	1
	Clip Board	Refundable	20	1
	Tablets with charger	Refundable	20	1
	Power bank	Refundable	10	1
	ID Card holder	Refundable	20	1
	ID Card	Refundable	20	1
	Permanent marker	Refundable	6 (Black)	
<b>Stationery</b>	Ball Pen		45	2 per person
	Pencil		25	
	Sharper		25	
	Loose sheet (Copy)		6	
	Eraser		25	
	Plastic bag		50	
	My Clear Bag		25(large)	
	Field Note book		25	1
	0.9 m stick		25 -	1
<b>Medicines</b>	First Aid Packet	Refundable	25	1

## D. List of Field Researchers with Assigned District

S.N	Name	Assigned District
Team A	Mr. Bhim Pd. Neupane (Team Supervisor)	Nuwakot
	Ms. Kunti kumari Rijal	
	Ms. Sangam lama Tamang	
	Ms. Karuna Dangol	
Team B	Mr. Jay Krishna Neupane (Team Supervisor)	Nuwakot
	Ms. Trisha Manandhar	
	Ms. Anita Budha	
	Ms. Akshata Shrestha	
Team C	Mr. Yujan Karmacharya (Team Supervisor)	Nuwakot
	Ms. Sapani Gurung	
	Ms. Anu Khadka	
	Mr. Mausam Shrestha	
Team D	Mr. Sanjib Rijal (Team Supervisor)	Nuwakot
	Ms. Kopila Khadka	
	Ms. Bishnu Shah	
	Mr. Chatur Timilasina	
Team E	Ms. Indira Anu Upreti (Team Supervisor)	Rasuwa
	Mr. Arun Kumar Nepali	
	Ms. Asmita Thapa Magar	
	Mr. Kamal Prasad Pokharel	

## E. Field Manual

# COMMUNITY BASED INJURY SURVEY WITH BURNS MODULE: PILOT FIELD TEST

## FIELD MANUAL 2016



### DEVELOPED AND EXECUTED BY

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## 1 BACKGROUND

Many low-income countries do not have evidence from robust community-based surveys to estimate the burden of injury-related deaths and morbidity (1). Injury experts have recommended the use of such surveys for increasing the knowledge-base to inform appropriate burns prevention strategies (2,3). The World Health Organization (WHO) Guidelines for Conducting Community Surveys on Injuries and Violence (2004) (1) includes a standardized tool for the systematic collection of injury data but this tool gathers limited information about risk factors for burn injury.

In 2013/14 the Global Alliance for Clean Cookstoves (GACC) Working Group on Burn Data developed a list of potential domains and questions for a community-based survey of burn injury in low- and middle-income countries. Dr Hilary Wallace was invited to consolidate the suggestions from the working group into an expansion of the WHO Guidelines (1). This draft document was presented to a meeting of burn injury experts with the GACC in Washington DC (May 2014). The new tool enables the collection of data about the rate of burn injuries in the community (mortality and morbidity), household hazards and risk factors for burn injury, health-seeking behaviour, treatment of burn injury and the impact of burn injury.

## 2 OVERALL PURPOSE OF THE STUDY

The objective of the study is to undertake a field test (pilot test) of the community-based injury survey with burn injury module in Nepal. This field test will conduct the injury survey at an operational scale in a real-world context and generate pilot data. Most importantly the field testing will provide guidance for future large-scale surveys (operational practicality, performance of questions). The analysis of the pilot data will provide some estimates of injury rates.

### 2.1 IMPORTANT CONTACTS

The contact details of the members of the Community-based Injury Survey with Burns Module – Pilot field test is provide below. In case you are in the field and need advice, please contact a member of the study team.

#### **Name of funding Organization**

The United Nations Foundation  
<http://www.unfoundation.org>

#### **Health International**

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Email: [ramesh.pathak@herd.org.np](mailto:ramesh.pathak@herd.org.np)**3 METHODOLOGY****3.1 SELECTION OF THE STUDY DISTRICTS**

Nuwakot and Rasuwa districts from the Central Development Region were purposively selected. The household use of biomass/firewood in these districts are: 89.8% in Nuwakot and 89.6% Rasuwa. Also, the Central region represents 50% of the fire-related injuries in Nepal (NHRC, 2009). Nuwakot is a hill district and Rasuwa is a mountain district.

**3.2 SELECTION OF CLUSTERS**

A cluster is a group of households in the same geographical area. In this survey, ward is considered as a cluster. The clusters were selected using the method of probability proportionate sampling relative to the number of households as determined by the 2011 Census.

Subsequently, the sampling frame included 68, 935 households from 736 clusters from two districts. Thirty clusters were then selected using probability proportionate to the number of households.

In this survey, we have 30 clusters which is presented in the table below:

**Name of VDC with clusters and district:**

District	Cluster #	VDC	Ward No.	HH Size
Nuwakot	1	Balkumari	7	55
	2	Betini	6	42
	3	Bidur Municipality	2	269
	4	Bidur Municipality	5_A	246
	5	Bidur Municipality	9_B	203

District	Cluster #	VDC	Ward No.	HH Size
	6	Bungtang	5	30
	7	Chaughada	2	110
	8	Dangsing	2	104
	9	Duipipal	7	296
	10	Gaunkharka	3	58
	11	Ghyangphedi	6	79
	12	Kabilas	1	113
	13	Halde Kalika	1	78
	14	Kaule	5	115
	15	Khanigaun	2	93
	16	Kumari	5	305
	17	Madanpur	1	188
	18	Mahakali	6	59
	19	Okharpauwa	2	85
	20	Ralukadevi	6	134
	21	Samari	1	91
	22	Samundratar	8	43
	23	Suryamati	1	102
	24	Taruka	8	112
	25	Thaprek	2	94
	26	Urleni	5	83
Rasuwa	27	Dandagoun	7	205
	28	Laharepouwa	1	203
	29	Ramche	5	55
	30	Timure	4	<b>33</b>

### 3.3 SELECTION OF HOUSEHOLDS

1080 households' needs to be included in this Community-based Injury Survey (based on the resource and time availability; not based on the prevalence of injury and burn).

**From each cluster we need to select 36 households.**

The selection of the households needs to be done by doing interval sampling as explained below.

### 3.4 MAPPING AND LISTING THE HOUSEHOLD

**Step 1:** The DC and the team is responsible for drawing a map showing the location of all household in the cluster. This can be done in consultation with health workers or other key informants in the cluster: Female Community Health Volunteer (FCHV); Local social worker, Village Health Worker, Local Shopkeeper; School teacher, and other people who has a good understanding of the local context. DCs and enumerators will walk through the identified cluster to get an understanding of the context and organise a meeting with the key informants (listed above) in order to draw this map.

**Step 2:** The DC must find the total number of households in each clusters-a list including number of household will be derived from Census 2011 and provided to DC. The total

number of households will then be divided by 36 in order to calculate the interval to be used in the interval sampling process. This number will remain constant throughout the study, even if more households are identified in the field. If major variation observed between the household number from Census and local mapping, the DC should verify the number several times and take the appropriate number to calculate the sampling interval.

**Note:** *Each cluster needs to have at least 72 households (36 x 2) for doing interval sampling of the household. In case of cluster having less than 72 households, merge with the neighbouring wards to make one cluster.*

### **Step 3: Draw a map of the Cluster and the location of households:**

- Ask the key informants to help you to draw a map of the cluster. Where this includes several wards you will need to combine the information from different wards from each key informant as relevant. If required additional advice on the location of landmarks and houses can be taken from local shop keepers etc.
- The map must show approximately where **ALL** houses are located. NB these maps will be used to inform the interval sampling to make sure that no houses are missed when counting the interval between households to be interviewed.
- Make sure the map includes **all landmarks** that will help the enumerators locate the households. For example, include the health facilities, shops, temples, notable geographical features etc. You will need to make your map as clear as possible to assist the enumerators in locating households.
- If you are in an area with very remote households and settlements, households in the area. Keep checking whether households have been missed by asking the key informants: "this area of the map looks blank – are you sure there are no households here?"
- In remote areas, enumerators can also show their map to households after interview and double check whether any households have been missed off the map.
- Enumerators can add in households and local feature once they begin the data collection.

The missing households need to be included when counting the sample interval.

### **At the end of this initial phase you will need to have:**

- The interval to be used in each cluster in the district
- Cluster map showing approximate location of all households

## **3.5 INTERVAL SAMPLING AND INTERVIEWING PROCESS**

**Step 1:** The DC and the team will choose a house randomly. This will form the starting point of the interval sampling (HH 1 in the example below). The enumerators will then interview household members.

**Step 2:** Using the map drawn in the first phase, the enumerator will then count the number of houses following the pre-specified interval and then interview that household. E.g. if the interval is 3, the enumerator will start counting from the house they have just conducted the interview and count on 3. When they reach the 4th house they will interview HH members as specified.

For Example: If the number of HHs is 100 and the sample required is 36, then the interval is  $100/36 = 2.78 \sim 3$ .

**NB: If no-one is available in the household to be interviewed, the enumerators take the neighbouring household in the forward direction. But if there is no one in the last household, then the enumerator should move in background direction to interview the preceding household.**

### 3.6 STUDY POPULATION:

For the household questionnaire: Head of the household or any knowledgeable person of the household 18 years of age.

#### For Injury module questionnaire

- Injury victim (if present at time of interview, current age  $\geq 18$  years and is able to understand and/or respond to the questions)
- Another knowledgeable HH member (proxy) if victim  $< 18$  years, is not present, or is unable to understand and/or respond to the questions.

#### In summary,

**Total Household interview: 1,080**

**Total number of Cluster: 30**

**Total Household per cluster: 36**

## 4 TOOLS AND TECHNIQUES

A set of tool is used for this survey. The required information for this study should be collected by using the predesigned questionnaire by interviewing the relevant subjects who are the target population for this study. Electronic data collection in tablet will be done for this survey. Direct face to face interview will be used for the process of data collection.

Tools	Techniques	Subjects/Respondents
Household Questionnaire	Interview	Household head or any knowledgeable person of the household 18 years of age or over.
0.9 Metre Stick	Measurement	To assess the height of the stove or fire from the ground

#### • DATA COLLECTION PROCEDURES:

- Each Field Researchers will be provided a tablet
- Hard copies for household survey tools will also be carried for back up

## 5 KEY OPERATIONAL DEFINITION

**Injury:** An injury is any physical damage to the body such as a wound, bruise, burn, fracture, internal injury, poisoning or loss of consciousness due to a blow to the head or neck, suffocation/strangulation, and for this study it should ***Serious enough to need medical treatment or to change their 'normal' activity for one or more days.***

**Fracture (broken bone):** Any bone of the body was broken. The broken bone may be under the skin or poking through.

**Sprain or dislocation:** Joint or muscle is damaged but no bones are broken (includes limbs, neck or back)

**Cut, bite or other open wound:** Skin is broken and there is usually bleeding.

**Bruise or superficial injury:** The skin changes colour (e.g. blue or purple) from damage, but it is not broken or bleeding.

**Burn:** The skin is damaged by something hot (hot liquid, flames/fire, hot object), electricity or chemicals

**Poisoning:** A harmful substance is swallowed or comes into contact with the skin

**Concussion/head injury:** A blow to the head causes dizziness, confusion or unconsciousness (Note: this does not include facial injuries – these should be recorded as cuts, bruises, fractures etc)

**Internal injury/internal organ injury:** Damage to the inside organs of the body – the skin may be intact or broken.

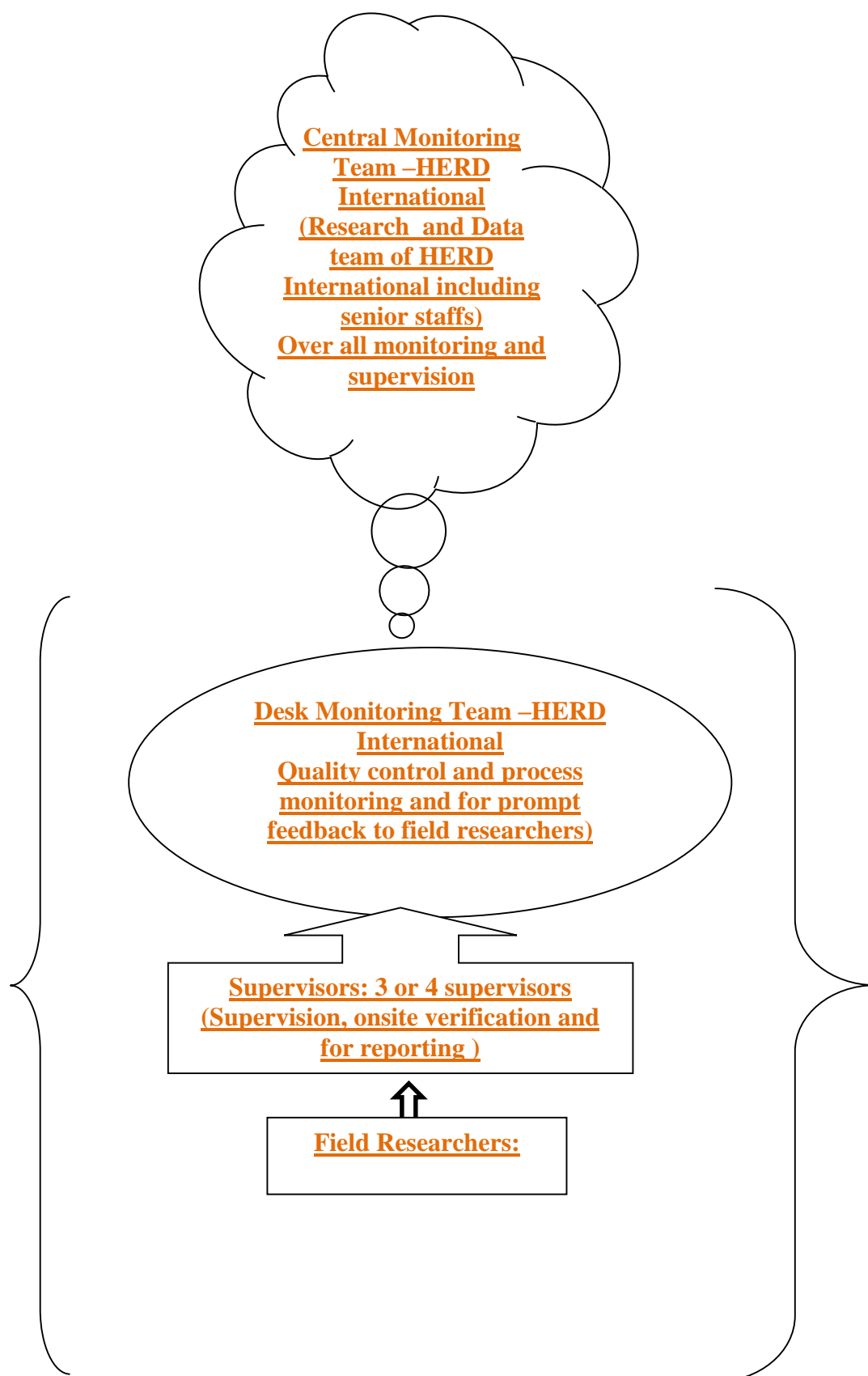
**Suffocation:** The person cannot breathe because air cannot get into the body

**Cookstove:** Any kind of stove used for cooking. It could be open fire stove or improved cook stove.

**Space heating/heater:** Any method or instrument used to make the house or rooms warm.



## 6 FIELD IMPLEMENTATION MODALITIES



## 7 ROLES AND RESPONSIBILITIES

S.N.	Responsible person(s)/organization(s)	Activities
1.	<b>United Nations Foundation</b>	Financial support
2.	<b>HERD International</b>	To provide technical support. To conduct onsite verification of data collection and supervisor's supervision procedures, quality of work, field questionnaire. To provide support to both supervisors and field researchers in coordinating respective districts and authorities, and other logistic support as and when required.
3.	<b>Team Supervisor(s)/Field Monitor(s)</b>	Supervision and monitoring of the field researchers, editing and correcting filled questionnaire and reporting to the central team or to the monitoring team residing in the central office of HERD International about the daily progress, any issues and challenges faced. Safety, proper storage, and transportation of the tablets and/or filled questionnaire to the HERD International office are also other greater responsibilities of supervisors. In the case of paper questionnaires, supervisors have right to refusal in receiving the questionnaire filled by field researchers in case of errors, blank spaces in the questionnaire or have right to re-send field researcher for re-collection of data if there is any discrepancies or error in the data collected.
4.	<b>Field Researcher(s)/enumerator(s)</b>	To collect of data from the respective selected households. To make a good co-ordination with supervisors, to keep the tablets and/or questionnaires safe and to handover them to the supervisors.

## 8 SUPERVISION AND MONITORING

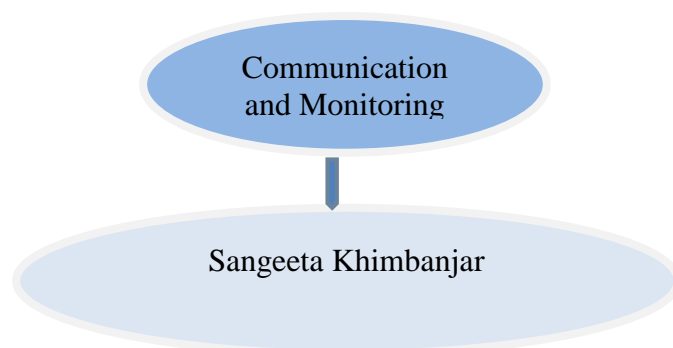
A central supervision team consisting of HERD International team members will make regular spot-check visits to the district's respective communities to monitor the process and check the quality of the data being collected. A supervision checklist is available to support this process.

### 8.1 MONITORING AND COMMUNICATION DESK

A survey monitoring and communication desk will be established in HERD International central office. All team supervisors will report their daily progress to the desk. Two

telephone lines (01 423 8045 and 01 4102072) will be open from 9:00 am to 5:00 pm. Other than office hours, field staff can contact in mobile numbers of study team.

**For routine updates of the progress of the field work, contact Monitoring and Communication Desk of HERD International:**



## 9 ADMINISTRATIVE MATTERS

**Field expenses:** All field staff will receive advance payment, at least 60% of their total estimated field cost, from HERD International prior to field departure. All travel and accommodation will have to be arranged by field team members as appropriate to local context. Cost for communication will be reimbursed at an appropriate rate.

## 10 SAFETY PROTOCOL

Your safety is of the utmost importance at all times. You must put your safety first when operating in the field and do not take risks.

1. Carry the emergency phone list with you at all times.
2. Carry a fully charged and working cell phone with you at all times.
3. Check in and check out with your supervisor. Every time that you go into the field you must call your supervisor prior to departure. You must confirm with your supervisor the following information:
4. Check out with your supervisor at the stated time.
5. Where you will be going that day. (The exact neighborhood and streets you plan to cover). If you deviate from this plan you **MUST** call your supervisor to update them on your location.
6. Who you will be working with.
7. Confirm the phone number of the cell phone that you are using.
8. When you expect to be done your fieldwork for the day, i.e. your check-out time to say you have completed your fieldwork. You **MUST** call your supervisor before this time! If you do not call your supervisor, they will call you. **IT IS EXTREMELY IMPORTANT THAT YOU CHECK OUT WITH YOUR SUPERVISOR AT THE SPECIFIED TIME.**
9. If at any time you do not feel comfortable in an interview and feel that your personal safety may be at risk, excuse yourself from the setting, thank the individual for their time, and say that you will be following up with them at a later date.
10. You can start field work early morning as appropriate. All fieldwork should be completed by the evening before it gets dark (you must return to your place of stay before dark). Do not conduct fieldwork in late evening or night under any circumstances.

11. Do not put your personal safety at risk. Take your time and exercise caution when in the field. Report immediately if any instances occur, be cautious and careful all the time.

## **11 CONDUCTING AN INTERVIEW**

The art of interviewing develops with practice but there are certain basic principles that are followed by every successful interviewer.

### **11.1 BUILDING RAPPORT WITH THE SUBJECT/RESPONDENT**

As an interviewer, your first responsibility is to establish a good rapport with a subject/respondent. At the beginning of an interview, you and the subject/respondent are strangers to each other. The subject's/respondent's first impression of you will influence their willingness to cooperate throughout the study period. Be sure that your manner is friendly as you introduce yourself. You will also be given a letter and an identification badge that states that you are working with HERD International.

### **11.2 MAKE A GOOD FIRST IMPRESSION.**

When you arrive at a household, do your best to make household members feel at ease. Show the letter provided by HERD International. With a few well-chosen words, you can put the household members in the right frame of mind for the interview. Open the interview with a smile and greeting such as "good afternoon" and then proceed with your introduction.

### **11.3 OBTAIN SUBJECT(S)'/RESPONDENT(S)' CONSENT TO BE INTERVIEWED.**

Obtain a subject's/respondent's informed consent for participation in the survey before you begin an interview. Before starting the interview, explain the purpose of the survey and assure them that their participation in the survey is completely voluntary and that it is their right to refuse to answer any questions or stop the interview at any point.

### **11.4 ALWAYS HAVE A POSITIVE APPROACH.**

Never adopt an apologetic manner, and do not use words such as "Are you too busy?" Such questions invite refusal before you start. Rather, tell the subject/respondent, "I would like to ask you a few questions" or "I would like to talk with you for a few moments."

### **11.5 ASSURE CONFIDENTIALITY OF RESPONSES.**

If the subject/respondent is hesitant about responding to the interview, explain that the information you collect will remain confidential, no individual names will be used for any purpose, and all information will be grouped together to write a report. Also, you should never mention other interviews or show completed questionnaires to the supervisor or field editor in front of a subject/respondent or any other person.

### **11.6 ANSWER ANY QUESTIONS FROM THE SUBJECT/RESPONDENT FRANKLY.**

Before agreeing to be interviewed, the subject/respondent may ask you some questions about the survey or how the households are selected to be interviewed. Or they might be more concerned about the length of time of interview. At this time, be direct and pleasant when you answer.

Subjects/respondents may ask questions or want to talk further about the topics you bring up during the interview. It is important not to interrupt the flow of the interview so tell them that you will be happy to answer their questions or to talk further after the interview.

### **11.7 INTERVIEWING THE SUBJECT/RESPONDENT ALONE OR IN GROUP.**

In general, the presence of a third person during an interview can prevent you from getting frank, honest answers from a subject/respondent. It is, therefore, very important for you to decide whether to conduct the interview privately (alone) or in a group and that all questions be answered by the subject/respondent. In case of private interview, if other people are present, explain to the subject/respondent that some of the questions are private and ask to interview the person in the best place for talking alone. Sometimes asking for privacy will make others more curious, so they will want to listen; you will have to be creative. Establishing privacy from the beginning will allow the subject/respondent to be more attentive to your questions.

In case of this study, household members might be together in a household at the time of visit and might have been together even during the earthquake, too, so you may conduct the interview in other household members' presence, too, if the subject/respondent feels comfortable about it.

## **12 TIPS FOR CONDUCTING THE INTERVIEW**

### **12.1 BE NEUTRAL THROUGHOUT THE INTERVIEW.**

Most people are polite and will tend to give answers that they think you want to hear. It is therefore very important that you remain absolutely neutral as you ask the questions. Never, either by the expression on your face or by the tone of your voice, allow the subject/respondent to think that he/she has given the "right" or "wrong" answer to the question. Never appear to approve or disapprove of any of the subject's/respondent's replies.

If the subject/respondent gives an ambiguous answer, try to probe in a neutral way, asking questions such as the following:

"Can you explain a little more?"

"I did not quite hear you; could you please tell me again?"

"There is no hurry. Take a moment to think about it."

### **12.2 NEVER SUGGEST ANSWERS TO THE SUBJECT/RESPONDENT.**

If a subject's/respondent's answer is not relevant to a question, do not prompt him/her by saying something like "I suppose you mean that. . . Is that right?" In many cases, he/she will agree with your interpretation of his/her answer, even when that is not what he/she meant. Rather, you should probe in such a manner that the subject/respondent himself/herself comes up with the relevant answer. You should never read out the list of coded answers to the subject/respondent, even if he/she has trouble answering.

### **12.3 DO NOT CHANGE THE WORDING OR SEQUENCE OF QUESTIONS.**

The wording of the questions and their sequence in the questionnaire must be maintained. If the subject/respondent has not understood the question, you should

repeat the question slowly and clearly. If there is still a problem, you may reword the question, being careful not to alter the meaning of the original question. Provide only the minimum information required to get an appropriate response.

## **12.4 HANDLE HESITANT SUBJECTS/RESPONDENTS TACTFULLY.**

There will be situations where the subject/respondent simply says, "I don't know," gives an irrelevant answer, acts very bored or detached, or contradicts something they have already said. In these cases, you must try to re-interest them in the conversation. For example, if you sense that they are shy or afraid, try to remove their shyness or fear before asking the next question. Spend a few moments talking about things unrelated to the interview (for example, their town or village, the weather, their daily activities, etc.).

If the subject/respondent is giving irrelevant or elaborate answers, do not stop them abruptly or rudely, but listen to what they have to say. Then try to steer them gently back to the original question. A good atmosphere must be maintained throughout the interview. The best atmosphere for an interview is one in which the subject/respondent sees the interviewer as a friendly, sympathetic, and responsive person who does not intimidate them and to whom they can say anything without feeling shy or embarrassed.

## **12.5 DO NOT HURRY THE INTERVIEW.**

Ask the questions slowly to ensure the subject/respondent understands what is being asked. After you have asked a question, pause and give the subject/respondent time to think. If the subject/respondent feels hurried or is not allowed to formulate their own opinion, they may respond with "I don't know" or give an inaccurate answer and talk about irrelevant stuff. If you feel the subject/respondent is answering without thinking just to speed up the interview, say to the subject/respondent, "There is no hurry. Your opinion is very important, so consider your answers carefully."

## **13 FREQUENT MISTAKES MADE BY ENUMERATORS**

- A. Filter – Make sure to refer to the earlier response.
- B. Reading the question – lost eye contact, questions not internalized.
- C. Questions are long and found difficulty to ask the question. This is due to lack of internalization of the question. Should follow the steps of the question. Read the question carefully, if necessary many times. Tick always "We can do."
- D. Reading the instruction written for a question that is meant for interviewer only. Do not, in any case, read them aloud. Sometime even "if necessary observe the toilet" was also read.
- E. Often the answers are read out to the subjects/respondents. The options in the right hand side of the questionnaires are not meant to be read aloud. If they are meant to be read, they will be kept on the left hand side and instructed to read aloud.
- F. Taking too much time to ask the question and recording the answer.
- G. Using acronyms. Rather use the full forms.
- H. Often seeing watch or mobile phone. May be due to lack of confidence.
- I. Not revisiting the questionnaire after completing the interview. Should quickly go through the responses to find out if there are any gaps. It will help to fill up the gaps instantly.

- J. Not acknowledging subject/respondent for his/her cooperation after completion of interview. Formally leave the household with formal greeting and thank for their time and contribution.

## 14 WHAT TO DO FOR COMPLETED QUESTIONNAIRES?

It is the responsibility of the interviewer (supervisors/field researchers) to review each questionnaire when the interview is finished. This review should be done before you leave the spot so that you can be sure every appropriate question was asked, that all answers are clear and reasonable, and that your text/number inputs, if any, are correct. After that all completed and saved questionnaires must be sent to HERD International; in the case of paper questionnaires, consent forms must be placed tied and sealed in plastic bags.

**In the situation where you have to use a paper questionnaire**, do not recopy questionnaires. As long as the answers are clear and readable, it is not necessary that the questionnaire itself be neat. Every time you transcribe the answers to a new questionnaire, you increase the chance of an error. For this reason you are not allowed to use work sheets to collect information. Record ALL information on the questionnaires provided. Any calculations you make should be written in the margins or on the back of the questionnaires.

Anything out of the ordinary should be explained in your field diary, or in the comments sections (for paper based questionnaires, in the margins near the relevant question or in the comments section at the end), or in the remarks section in case of tablet based questionnaire. These comments are very helpful to the supervisor and field editor in checking questionnaires. Comments are also read in the office and used to resolve problems encountered during data entry.

If you take the tablet and/or filled questionnaires to the place where you are staying in the evening ensure that they are in a safe and secure location, such as a desk drawer. Do not leave the tablet and/or filled questionnaire in a communal location where they are accessible to other persons not involved in the study and could be mistaken as mail and opened. You are responsible to ensure that the tablet and/or questionnaire remain sealed, are kept safe, and the participants confidentiality is maintained. Submit the filled questionnaire to Supervisors as soon as possible. If you do not have wifi, ensure the questionnaires are saved on your device and submit them as soon as you are in a wifi zone. In case of paper based questionnaires, if travel distance to reach to supervisors is too long and unable to submit immediately after collection, keep the completed questionnaires until another responsible person of the survey team collects from you.

## 15 TROUBLESHOOTING

During the time of fieldwork, you may come across some problematic situations. Below, you will find some outlines how to react in specific situations. Always seek the assistance of a cluster supervisor or a team member if you encounter additional problems.

***The subject/respondent refuses to participate in the research***



In case the respondents' refusal to participate, do not push them to do so and do not ask them why they are refusing for the same. You should thank them for their time and leave.

### ***The subject/respondent asks for money***

It is not possible to offer respondents payment for their participation in the interview. In case a subject/respondent asks for money, you should explain that you cannot offer this but their participation is very valuable for the research. Accept it if they decline participation on the ground of not being offered payment for it.

### ***The subject/respondent is hesitant about giving financial information***

Make sure that you ask those questions in a sensitive way. If he/she is concerned about giving this information, reassure him/her that their answers will be treated confidentially. Explain that information will not be used for other purposes than this study and no one will know about it.

### ***The subject/respondent is rude***

In this case, do not respond to the rudeness, but remain patient and neutral. If the subject/respondent is being offensive and you want to end the interview, do this in a polite manner. Please let a member of the team know in case this happens.

### ***The subject/respondent does not understand a question***

Read out the question again in the way it is written in the questionnaire. In case the subject/respondent asks for more clarification, you may rephrase that question in a simpler language. However, it is important that the meaning of the question is not changed. Accuracy of answers will depend on the skills of data collectors. Problems may arise from rephrasing questions so it is important that the interviewer read each question as it is written, but not the responses unless specified on the questionnaire.

## **16 SURVEY NORMS**

- Except for illnesses, any person who is absent from duty during any part of the training or any part of the fieldwork (whether it is a whole day or part of a day) without prior approval from his/her supervisor may be dismissed from the survey. Supervisor must inform to the central team of HERD International.
- Throughout the survey training and the fieldwork period, you are representing HERD International. Your conduct must be professional and your behavior must be congenial in dealing with the public. We must always be aware of the fact that we are only able to do our work with the good will and cooperation of the people we interview. Therefore, any team member who is consistently overly aggressive, abrupt, or disrespectful to the people in the field may be dismissed from the survey team.
- For the survey to succeed, each team must work closely together, sharing in the difficulties and cooperating and supporting each other. We will attempt to make team assignments in a way that enhances the cooperation and good will of the team. However, any team member who, in the judgment of the study central team, creates a disruptive influence on the team may be dismissed from the survey.
- It is critical that the data gathered during the fieldwork be both accurate and valid. To control for inaccurate or invalid data, spot checks will be conducted.



Interviewers may be dismissed at any time during the fieldwork if their performance is not considered adequate for the high quality this survey demands.

- Don't forget to take informed consent before the conduction of an interview.
- The interviewer should be familiar with all the questions and responses choices of the questionnaire.
- The interviewer should listen carefully to the responses provided by the subject/respondent, and record the response by ticking the most appropriate boxes or filling in the blanks as instructed.
- Responses should be marked right away on the questionnaire. Frequent responses that are not included in the options provided should be identified and mentioned to supervisors.
- Any unusual circumstances for a specific subject/respondent should be written on the questionnaire (e.g., elderly subject/respondent unable to hear well or multiple people in the household answering the questions).
- Before entering into a new section, inform subjects/respondents about the section, for instance, "Now, I would like to take some information about structural and non-structural causes for injuries and deaths."
- Proceed ahead with the questionnaire if subject/respondent agreed to be interviewed, otherwise, end this interview and start interview with another subject/respondent.

## 17 REPORTING TEMPLATES

- Daily Activity Sheet: Daily activity sheets will be provided to all field researchers, including the supervisor, and everyone needs to fill these sheets clearly on a daily basis.
- Recording Sheet: Recording sheets will be provided to the supervisor of each team, and he/she will be responsible to fill this sheet precisely on a daily basis.

## 18 HOUSEHOLD QUESTIONNAIRE

### Questionnaire Details

**[NOTE: Please swipe right on the tablet's screen to go to the next page, and swipe left to go to the previous page. Some questions appearing in a page are mandatory to be answered so you cannot go to the next page unless you fill or answer that question/s.]**

<b>Informed Consent</b> Read out the informed consent to the subject/respondent before you start the interview, and ask him/her whether you can start the interview. If yes, select 'Yes' and swipe right to proceed further; if no, thank him/her for his/her time and select 'No' and swipe right to wrap the interview.  <b>Note:</b> if you select 'No', the <b>questionnaire will end</b> and you will be asked to enter the details from the "interviewer's visit records" (as from below) and then ask you <b>"save and exit"</b> the when you swipe right	
<b>INTERVIEWERS VISITS RECORD</b>	
Interview Date	<b>Select</b> the date from the calendar on the screen
Name of interviewer	<b>Enter</b> your name
Result	<b>Select</b> one option from the list.  <b>Note:</b> Depending on your experience with the interview, you may only be able to complete this question at the very end.

### Interviewer's visits record

Record day, month and year of first (this is enough in case of completed interview in first visit), second and/or third interview dates in case of repeated visits.  
 Enter your name on Name of Interviewer section, and please type/mention any kind of limitations in carrying out the interview or any points needing attention on a space given on Interviewer's Remark section.

Select one of the results given as choices.

QN	Questions	Instruction
1	Name of District	Select one of the two districts (Rasuwa and Nuwakot) from the choices given.
2	Name of Municipality/VDC	Select one VDC/Municipality from the list provided <b>Note:</b> Only the VDCs of the district you selected in QN 1 will appear.
3	Ward number	Enter the ward number of sampled VDC
4	Name of the household head	<ul style="list-style-type: none"> <li>Enter the name of household Head</li> </ul> <b>Note:</b> Head of household is the member of household who is managing household

QN	Questions	Instruction
		activities and takes the decisions as well as responsibility in all household related matters. The Head can be either sex – male or female.
5	Sex of HH head	Enter the sex of household head.
6	Name of the Respondent	Please enter the name of respondent in this question <u>Note</u> : Respondents is the person who gives a response or answer to a question that is asked especially as part of a survey. Respondent: Senior female or any knowledgeable person of the household 18 years of age or over.
7	Age of the respondent	Ask and enter the <u>completed age</u> of the respondent
8	Sex of the respondent	Enter sex of respondents. The respondent can be either male or female.
<b>Section A: Household Module</b> Question objective: <ul style="list-style-type: none"> <li>• To describe household demographic characteristics</li> <li>• To identify household burn injury hazards</li> <li>• To estimate mortality rate due to injury in the community</li> <li>• To estimate the incidence of injuries in the community [Key indicators: incidence of road traffic accident; falls; burns; poisonings]</li> </ul> Respondent: Household head or any knowledgeable person of the household 18 years of age or over.		
<b>101 Caste/ Ethnicity</b>	What is your caste/ethnicity?	Select the ethnicity from the list provided in the tablet-PC (tools). Please remember that we want ethnicity not the surname in this question. For example, if surname of household head is Bhattarai then choice Brahmin/chettri option from the list provided. You will be provided ethnicity code for this question.
<b>102_PPI1 Household size</b>	How many household members are there?	Select the number of household members from the list provided in the tablet-PC. <u>Note</u> A person is counted as a household member if they live, eat and share income & expenses with other household members, and they have done so for the past six months; or intend to do so for the next six months. Newborns or newly married into the family people should count as members, even if they have not lived in the house for six months. Hired help, those who do not share meals, and those

QN	Questions	Instruction
		who have left the house permanently at the time of interview DO NOT count.
<b>102_PPI2</b>  <b>Income source</b>	In what type of job did the male head/spouse work the most hours in the past seven days?	Select the type of job from the list provided in the tablet-PC. <b>Note:</b> The head of household runs the household and oversees income/expenses/finances. This can be a man or woman, but this question is asking specifically about the male. If the person who oversees finances no longer lives in the household (is a migrant worker for example), the enumerator should make their best determination as to who the head is. If the head of household is a female, and has no spouse, option 'A' should be selected. The 'past seven days' refers to the seven days prior to the interview. A wage earner is a paid worker, a self-employed person is invested in their own business
<b>102_PPI3</b>  <b>Bedrooms</b>	How many bedrooms does your residence have?	Select an option provided in the tablet-PC. <b>Note:</b> Only count rooms exclusively used for sleeping. If a household is made up of multiple buildings, count all rooms used only for sleeping in all of the buildings.
<b>102_PPI4</b>  <b>Outside walls</b>	Main construction material of outside walls?	Select an option provided in the tablet-PC. If select ' <b>others</b> ', <b>enter</b> the responses by swiping right <b>Note:</b> This question only refers to the outside walls of the household itself and not any compound or boundary walls that surround the household. Observe the walls.
<b>102_PPI5</b>  <b>Roof material</b>	Main material roof is made of?	Select an option provided in the tablet-PC. If select ' <b>others</b> ', <b>enter</b> the responses by swiping right Note: This question only refers to the <b>main construction</b> material used in roof of household hold. <b>Thatch:</b> dried straw, reeds, etc. used for making a roof; a roof made of this material. <b>Tiles:</b> A flat, usually square, piece of baked clay, carpet or other material that is used in rows for covering walls and floors <b>Wood/planks:</b> Board made by sticking thin layers of wood on top of each other. <b>Observe the main material roof.</b>

QN	Questions	Instruction
		<b>Concrete/cement:</b> It is a composite building and construction material, used mainly in roofing and facade products because of its strength and durability.
<b>102_PPI8</b> <b>Toilet</b>	What type of toilet is used by your household?	Select an option provided in the tablet-PC. <b>Note: If household members do not have toilet or have no habits of using toilets then also select option 1.</b> <b>A communal latrine</b> is used by more than one household and is usually very rudimentary. <b>A household flush</b> is a toilet used only by the household, which washes away waste using a machine or bucket, to a sewage system or septic tank.
<b>102_PPI9</b> <b>Phones</b>	How many telephone sets/cordless/mobile does your household own?	Select an option provided in the tablet-PC.
<b>102_PPI10</b> <b>Land</b>	Does your household own, sharecrop-in, or mortgage-in any agricultural land? If yes, is any of it irrigated?	Select an option provided in the tablet-PC. <b>Note: Agricultural land</b> refers to fields, uplands, lowlands, etc that are used for agriculture. Kitchen gardens and the land which the household own doesnot count. <b>Share cropped-in land</b> is used by the household in exchange for dividing the harvest with the landlord. <b>Mortgaged-in land</b> is used by the household in exchange for a fixed cash payment (rent). Irrigated land is watered by human effort, other than rain or ice melt.
<b>103</b>	Where is your family living since the earthquake?	<b>Select</b> an option provided in the tablet.
<b>A2. Household energy use and supplementary information</b> <b>"The next questions are about cooking and the types of fuel and energy sources you use in the home."</b>		
<b>106</b>	What type of stove did your household mainly use for cooking?	Select an option provided in the tablet-PC. If select ' <b>others</b> ', <b>enter</b> the responses by swiping right If select option ' <b>4</b> ', it will <b>skip</b> to QN 111 otherwise it will skip to next question
<b>107</b> <b>Cooking fuel</b>	What type of fuel does your household mainly use for cooking?	Select an option provided in the tablet-PC. If select ' <b>others</b> ', <b>enter</b> the responses by swiping right If select option ' <b>1</b> ', it will <b>skip</b> to <b>QN 111</b> and if select option ' <b>2 to 5</b> ' it will skip to QN 108 when you swipe right <b>Note:</b>

QN	Questions	Instruction
		<p><b>Coal</b> is a flammable black hard rock used as a solid fossil fuel.</p> <p><b>Charcoal</b> is a lightweight, black residue, consisting of carbon and any remaining ash. Charcoal is usually produced by the heating of wood.</p> <p><b>Biogas (Gobar Gas):</b> It is a renewable energy source and in many cases exerts a very small carbon footprint. It can be produced by anaerobic digestion with anaerobic bacteria, which digest material inside a closed system, or fermentation of biodegradable materials.</p> <p><b>Note:</b> Firewood, cow dung, leaves, straw, thatches are considered as solid fuel.</p>
107 a	Does your household use anything else for cooking?	Select "yes" or "No" from the option
108 Other fuels for cooking	If yes, what else do you use? ( <b>circle all others used</b> )	Select the option provided in the tablet-PC. (In this you can select all other options used for cooking.)
109 Cooking location	Where is cooking usually performed?	Select the option provided in the tablet-PC. If the cooking is performed outside "3" then it will skip to QN 111.
110 Separate kitchen	Do you have a separate room which is used as a kitchen?	Select "Yes" or "No" in the tablet-PC
111 Source of light	At night, what do you mainly use to light your household? ( <b>select one only</b> )	Select the option provided in the tablet-PC. <b>select one only</b>
112 Water heating	What does your household mainly use for heating water for bathing when needed? ( <b>Select one only</b> ).	Select the option provided in the tablet-PC. If option "4" is selected it will skip to QN 113. If other options are selected then it will skip to QN 114
113 Gas geyser location	Is the gas geyser located inside the bathroom? ( <b>enumerator to observe</b> )	Select "Yes" or "No" in the tablet-PC Enumerator should observe before selecting the option.
114 Home heating methods	What does your household mainly use for space heating when needed? ( <b>select one only</b> ).	Select the option provided in the tablet-PC. Select one only. If the response is No heating "1" then it will skip to A2_S1.

QN	Questions	Instruction
	<b>Space heating is a method to warm up rooms of a house</b>	
<b>115 Space heater</b>	Tell me about the space heater. Is it: Refer to QN 114 to complete this question)	This question refers to QN 114.  Ask what type of space heating is used by the household.
<b>115a</b>	Traditional/open fire or manufactured?	Traditional space heating are usually open fire by using solid fuels such as wood, sticks. Example: Furnaces (Bhatti), or could be open fire cookstove used for cooking.  Manufactured are the ones that are designed commercially such as briquette
<b>115b</b>	With a chimney, flue or vent?	An outlet built in (usually a metal pipe, bricks/stones from where the smoke goes out from the home. (धूवां जाने ढूङ्गो/धुआँकश/धुआँदान)
<b>115c</b>	With a fan?	Fan here refers to a small battery or low voltage operated fan to help the fire burn easily to prevent much smoke.
<b>A2_S1 Burn first aid</b>	What is the best first aid for someone who has just been burned by heat or fire?	Write down the answers the respondent give in a free.

### A3. Injury-related deaths

*"People can be injured or poisoned by accident or on purpose. They may have hurt themselves or others may have caused them to be hurt. These next questions are about injuries that have happened to people living in your house." (Note to interviewer: Please explain again what is meant by the word "injury".*

**An injury** is any physical damage or wound, such as a laceration/bleeding, bruise, burn, fracture, internal injury, poisoning or loss of consciousness due to a blow to the head or neck, suffocation/strangulation. Injuries can result from a falling building, traffic accident, fall, fire, scald, electrocution, poisoning, drowning, gun shot, blunt object, sharp instrument such as a knife or an animal bite, chemicals or acid on the skin, or toxic fumes.)

QN	Questions	Instruction
<b>116 Injury deaths</b>	Has anyone who normally lived in this household died from an injury in the last 5 years?	Select an option provided in the Tablet P.C.  This question wants to ask about the death from an injury in the last five year.

QN	Questions	Instruction
<b>117 Number of injury deaths</b>	Could you please tell me how many members of your household died from an injury in the last 5 years?	Enter the number of household member died from an injury in the last 5 year.
<b>Ask the following questions for each member that has died from an injury in the last 5 years.</b>		
<b>118 Nature of injury causing death</b>	What caused the injury that they die from?	If select ' <b>others</b> ', <b>enter</b> the responses by swiping right
<b>118 a Earthquake</b>	Did the death happen as a result of the earthquakes in April-May 2015?	Ask if the injury that a person died from is a direct result of earthquake. Such as a person could be injured in earthquake.
<b>119 Intent</b>	How did the injury happen?	Ask whether the injury was unintentional or intentional. If the injury was direct result of the earthquake, it is unintentional (it's understandable, don't need to ask in these situations).
<b>120 Age at death</b>	How old was the injured person when he/she was hurt?	<b>Record age in complete years; years and months if the person is 5 years or under.</b>
<b>121 Place of death</b>	Where did the injured person die?  <b>Multiple answers possible (e.g. 1 and 3).</b>	Select an appropriate option provided in the tablet.
<b>122 Time of death</b>	How long after the injury occurred did the injured person die?	Select an appropriate option provided in the tablet.
<b>A4: Household schedule and injury screening</b>		
<b>123.</b> These next questions are about injuries in the people now living in your household. (Note to interviewer: If necessary, explain again what is meant by the word "injury" if necessary and list some examples).		
<b>123_c</b> Fill the details of each members of household as per the roster		
123_c_1)	Name	Type the full name of the member.
123_c_2)	Relationship with Respondent	Type the relation of respondent with that member.
123_c_3)	Age (years)	Type the complete age of that member [Years and months if <5 years]
123_c_4)	Sex	Select the sex of that member
123_c_5)	Was s/he injured during the Baisakh Earthquake	Select "Yes", or "No" from the options provided in the tablet.



QN	Questions	Instruction
	or any time after earth quake (25th April)	
123_c_7)	Does the person suffer a disability as the result of an injury up to five years ago?	Enter the code "1" for Yes, "2" for No and "98" for Don't Know. If 'No' or 'don't know', skip to next household member

**SECTION B: INJURY MODULE** Complete Section B for each separate injury event in columns 5 and 7.

Objectives:

- To explore the cause of injuries; in particular, burn injuries
- To explore risk factors for injuries; in particular, burn injuries
- To explore treatment and impact of injuries; in particular, burn injuries

Respondents:

1. Injury victim (if present at time of interview, current age  $\geq 18$  years and is able to understand and/or respond to the questions)
2. Another knowledgeable HH member (proxy) if victim < 18 years, is not present, or is unable to understand and/or respond to the questions

QN	Questions	Instruction
<b>Check 1</b>	Ensure whether the injured person is recorded as injured in HH roster, column 5. Copy household serial number from HH roster.	<b>Name of the injured household member will auto appear in tablet.</b>
<b>Check 2 Nature (WHO 1.2.5)</b>	Nature of physical injury <b>Note:</b> A person could have multiple event of injury in his/her lifetime. From those events, select/ask only one injury event that have been the most severe.  Probe the respondent which injury event have been the most severe one in terms of its consequences (but don't get confused with the death as a consequence).	Select an option provided in the tablet-PC.  Select the types of injuries from the most severe injury event.
<b>Check 3</b>	Respondent	Select an option provided in the tablet-PC.  If selected 'proxy', write the relation of the injured person (victim) to the respondent.
<b>B1. INJURY EVENT</b>		
<b>201Age (WHO 1.1.2)</b>	How old was the injured person when he/she was hurt?	(Record age in complete years; record both years and

QN	Questions	Instruction
		months if the person is 5 years or under)
<b>202 Sex (WHO 1.1.3)</b>	Is the injured person male or female?	Select the sex of the injured person
<b>203 Occupation (WHO 1.1.5)</b>	What is the injured person's current occupation?	Select person's current occupation of the injured person
<b>204 Date of injury</b>	On what date did the injury occur?	Enter the date of injury occur.
<b>205 Time of injury</b>	At what time did the injury occur?	Write the time of injury occur.
<b>206 Place (Adapted from WHO 1.2.1)</b>	Where was/ were the injured person/ you when the injury occurred?	Select the place where the injury occurred. If there are others than mentioned then specify it.
<b>207 Activity (Adapted from WHO 1.2.2)</b>	What was/ were the injured person/ you doing when he/she/you were hurt?	Select an option provided in the tablet-PC.
<b>208 Mechanism (WHO 1.2.3)</b>	How was/were the injured person/ you hurt?	Select an option provided in the tablet-PC.
<b>208a Earthquake</b>	Did the injury happen as a result of the earthquakes in April-May 2015?	Select an option provided in the tablet-PC.
<b>209 Intent (WHO 1.2.4)</b>	How did the injury happen? Was it an accident, did someone do this to the injured person/you, or did the injured person/you do this to himself/herself/yourself?	Select an option provided in the tablet-PC.
<b>210 Use of alcohol (WHO 1.2.6)</b>	In the 6 hours before the injured person/you was/were hurt, did he/she/you have any alcohol to drink (even one drink)?	Select an option provided in the tablet-PC. <b>Use precautions while asking to children under 18 years of age.</b>
<b>B2. BURN INJURY EVENT (If Check 2 = 06 (Burn) IN SECTION B, proceed with 211 , or else go to Q224</b>		
<b>211 Activity-burn injury</b>	What was the main event or activity contributing to the burn injury?	Select an option provided in the tablet-PC. If the contributing activity is "1" and "2" then it will skip to QN 212, if it is "3" then it will skip to QN 213, if it is "4,5,6,7,8,9,10" then it will skip to 214.
<b>212 Stove height</b>	At what height was the fire or stove located? <b>Use 0.9m stick to help judge height</b>	Use the 0.9 metre stick to measure the height of the fire or stove.

QN	Questions	Instruction
213 Repair object	What was being repaired? (Only if the burn injury happened while repairing electrical equipment.)	Ask and if needed probe what specific parts of an equipment was being repaired when the burn injury occurred.
214 Accidental movement	Was an accidental movement involved in causing the burn (e.g. fall, spill, clothing or hair catching fire, getting too close to fire or hot object)?	Select an option provided in the Tablet PC.
215 Equipment problem	Did an equipment problem contribute to the burn (e.g. gas leak, kerosene stove explosion, uncontrolled flames)?	Select an option provided in the Tablet PC. If "Yes" then specify it.
216 Unsafe activity	Was a person doing something unsafe/risky when the burn happened (e.g. electrical repairs, mishandling a pressure cooker, refueling stove while stove alight, and mixing water in hot oil to check hotness of oil)?	Select an option provided in the Tablet PC. If "Yes" then specify it.
217 Ignition of clothing	Did the person's clothing catch fire?	Select an option provided in the Tablet PC.
218 Medical pre-disposition	Did a medical reason contribute to the burn injury happening?	Select an option provided in the Tablet PC. If the contributing reason of burn injury is medical reason then it will move to the next question, otherwise it will skip to QN 220.
219 Medical reason	What was the medical reason that contributed to the burn injury happening?	Select an option provided in the Tablet PC.
220 Location in home	<b>Only for the burn injuries that happened in the home (refer to Q206)</b> If the burn happened at home, in which part of the house did the burn injury occur?	<b>This question is asked only for the burn injuries that happened in the home (refer to Q206)</b> Select an option provided in the Tablet PC.
221 Workplace activity	<b>Only for the burn injuries that happened in a workplace (refer to Q207). Includes cottage industries in the home.</b> If the burn injury happened at a workplace, what was the main	<b>This question is asked only for the burn injuries that happened in a workplace (refer to Q207). Includes cottage industries in the home.</b>

QN	Questions	Instruction
	type of activity at the workplace?	Select an option provided in the Tablet PC.
<b>222 Primary cause of burn</b>	What was the main cause of the burn?	Select an option provided in the Tablet PC. If the response is "2,3,4,5,6 and 7" then it will skip to QN 224. If the cause is chemical burn "8" then it will skip to QN 222_a.
<b>222_a</b>	If the burn was caused by chemical, where was chemical stored?	Enter the response. It will skip to QN 224 if "Don't know".
<b>223 Fuel source- flame burn</b>	If the burn was caused by flames /fire, what was the source of fuel?	Select an option provided in the Tablet PC.
<b>B3. INJURY TREATMENT</b>		
<b>224 First aid at scene (WHO 1.15.1)</b>	Did anyone try to help the injured person/you by giving first aid?	Select an option provided in the Tablet PC.  If response is other than "Yes" then it will to QN 226.
<b>225 Person who provided first aid (WHO 1.15.2)</b>	Who gave first aid to the injured person/you?  <b>Multiple answers possible.</b>	Select an option provided in the Tablet PC. More than one response can be selected in this question.
<b>226 Seeking medical care (WHO 1.4.1)</b>	After he/she/you was injured, was medical attention/treatment sought outside of the household (e.g. at a health facility, hospital, clinic)?	Select an option provided in the Tablet PC.  If response is other than "Yes" then it will to QN 232.
<b>227 Transport to health facility (Adapted from WHO 1.15.3)</b>	How did the injured person/you get to the health facility for treatment of his/her injuries?	Select an option provided in the Tablet PC. If others then specify.
<b>228 Transport time (WHO 1.15.4)</b>	How long did it take for the injured person/you to get to the health facility?	Select an option provided in the Tablet PC.
<b>229 Place of medical care (Adapted from WHO 1.4.2)</b>	Where did the injured person/you first go for medical treatment for his/her injury?	Select an option provided in the Tablet PC.
<b>230 Admission to hospital/ health facility (WHO 1.4.3)</b>	Was/were the injured person/you admitted to a hospital ward or health facility for treatment of his/her/your injury?	Select an option provided in the Tablet PC.  If response is other than "Yes" then it will to QN 232.

QN	Questions	Instruction
<b>231 Length of hospital stay (WHO 1.4.4)</b>	How many days did the injured person/you stay in the hospital for treatment of his/her injury?	Enter the month and days in number.  If don't know then enter 98.
<b>B4. BURN INJURY TREATMENT (If Check 2 = 06 (Burn), or else go to Q237)</b>		
<b>232</b>	Was cool, running water applied to the burned area for first aid?	Select an option provided in the Tablet PC.  If response is other than "Yes" then it will to QN 234.
<b>233</b>	If cool, running water was applied to the burned area, for how long was this carried out (minutes)?	Enter the time carried out in minutes (not in hours) <b>If don't know then enter 98.</b>
<b>234</b>	Was another home-based treatment used as first-aid?	Select an option provided in the Tablet PC. If "Yes" then specify.
<b>235</b>	<b>Refer to Q229 if any sort of care was sought</b> Did a relative or friend accompany the person with the burn injury/you to the health facility?	Select an option provided in the Tablet PC.  <b>Refer to Q229 if any sort of care was sought</b>
<b>236</b>	<b>Refer to Q230 if the injured person was admitted in the hospital</b> If the person with the burn injury /you was admitted to hospital did they have any operations?	Select an option provided in the Tablet PC. <b>Refer to Q230 if the injured person was admitted in the hospital</b>
<b>B5. IMPACT OF INJURY – IMPAIRMENT AND DISABILITY</b>		
<b>237 Effect on usual activities (WHO 1.5.1)</b>	As a result of the injury, did the injured person/you suffer any impairment that prevented him/her from performing his/her usual activities (e.g. going to work or school, doing housework, playing etc.) for one or more days?	Select an option provided in the Tablet PC.
<b>238 Return to normal activity (WHO 1.5.2)</b>	Since the injury occurred, has/have the injured person/you been able to return to his/her normal activities?	Select an option provided in the Tablet PC. If "Fully" return to normal activities then it will skip to QN 238a and "only partially" return to normal activities then it will skip to QN 238b.
<b>238a</b>	If yes,fully then after how long?	Enter the month and days.
<b>238b</b>	If yes,but only partially then after how long?	Enter the month and days.

QN	Questions	Instruction
<b>239 Physical disability (WHO 1.3.1)</b>	<b>If the injury happened more than 6 months ago</b> Did the injured person/you suffer a physical disability as a result of being injured?	Select an option provided in the Tablet PC.  If response is other than "Yes" then it will to QN 241.
<b>240 Nature of disability (Adapted from WHO 1.3.2)</b>	In what ways was the injured person/you physically disabled?  <b>Multiple answers possible.</b>	Select an option provided in the Tablet PC.
<b>B6. ECONOMIC IMPACT OF INJURY</b>		
<b>241 Loss of employment (WHO 1.5.3)</b>	Did the injured person/you lose his/her job as a result of being injured?	Select an option provided in the Tablet PC.
<b>242 Loss of job - household member) (Adapted from WHO 1.16.3)</b>	Did anyone in the household lose days of work or school to take care of the injured person/you?	Select an option provided in the Tablet PC. If "Yes" then it will skip to QN 242a.
<b>242a</b>	If yes, then specify	Enter the month and days.
<b>243 Decline of household income (WHO 1.16.1)</b>	Did the usual household income (money coming in, not expenditures) decline as a result of the injury event?	Select an option provided in the Tablet PC.
<b>244 Decline in food consumption (WHO 1.16.2)</b>	Did the usual household food consumption decline as a result of the injury event?	Select an option provided in the Tablet PC.
<b>245 Loans to pay for medical treatment (WHO 1.16.4)</b>	Did the household have to borrow money to take care of the injured person/you?	Select an option provided in the Tablet PC.
<b>246</b>	Did the household have to depend on charity to take care of the injured person/you?	Select an option provided in the Tablet PC.
<b>247 Selling possessions (WHO 1.16.5)</b>	Did the household have to sell anything to pay for medical treatment for your/ the injured person or make up for loss of income?	Select an option provided in the Tablet PC.
Give thanks to the respondent for their valuable time and information.		

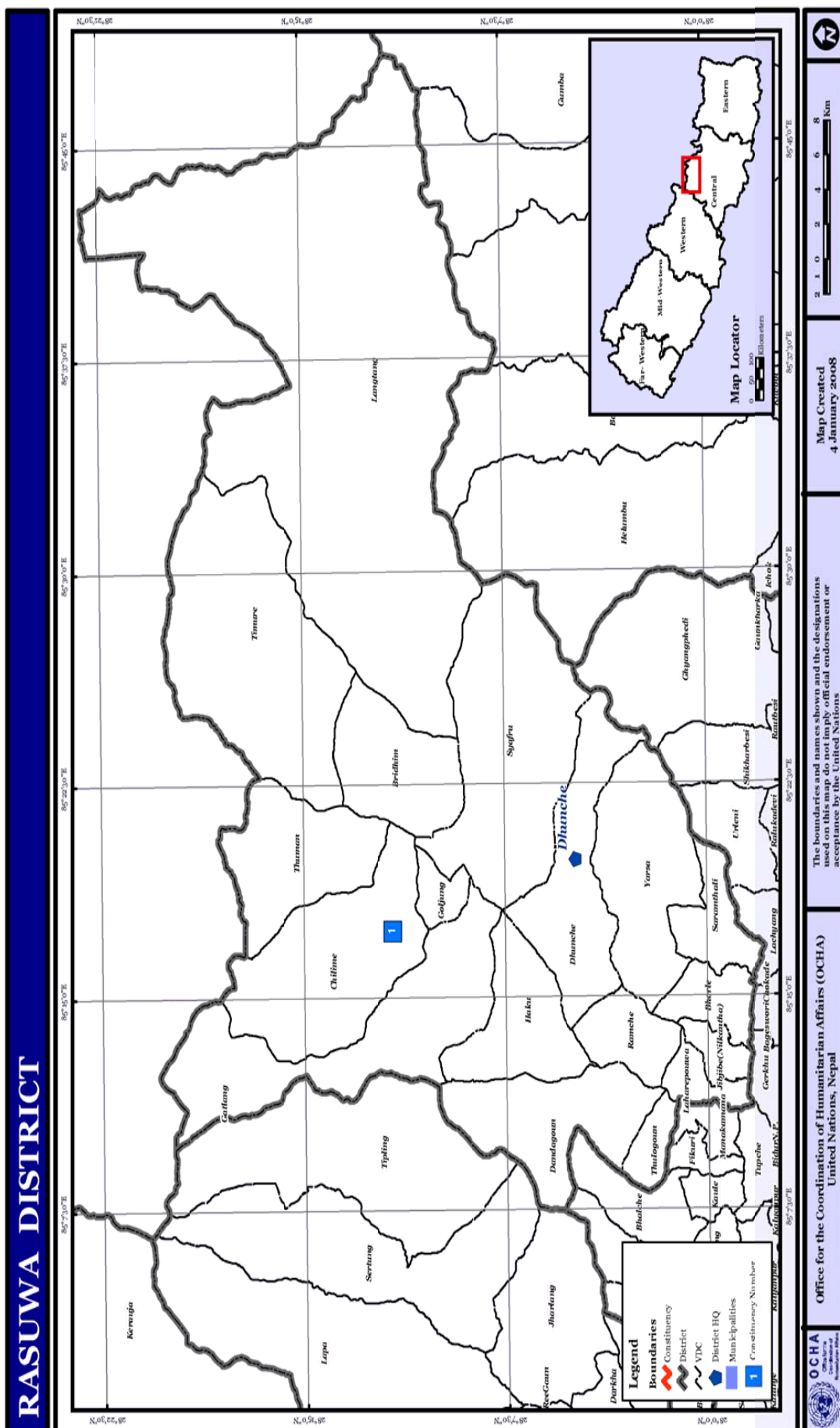
## ANNEX

### ANNEX 1: CONTACT LIST

SN	Person	Contact number
	<b>HERD International office</b>	<b>01-4238045, 01-4102072</b>
	<b>Operational Team</b>	
1	Ramesh Pathak	9801033253, 9841835229
2	Homnath Subedi	9851092214
	<b>Technical Team</b>	
1	Uden Maharjan	9841700845
2	Sangeeta Khimbanjar	9741311020
3	Subash Gajurel	9841359433
	<b>Communication and Desk Monitoring</b>	
1	<b>Sangeeta Khimbanjar</b>	9741311020
2	<b>Puja KC</b>	9841094077

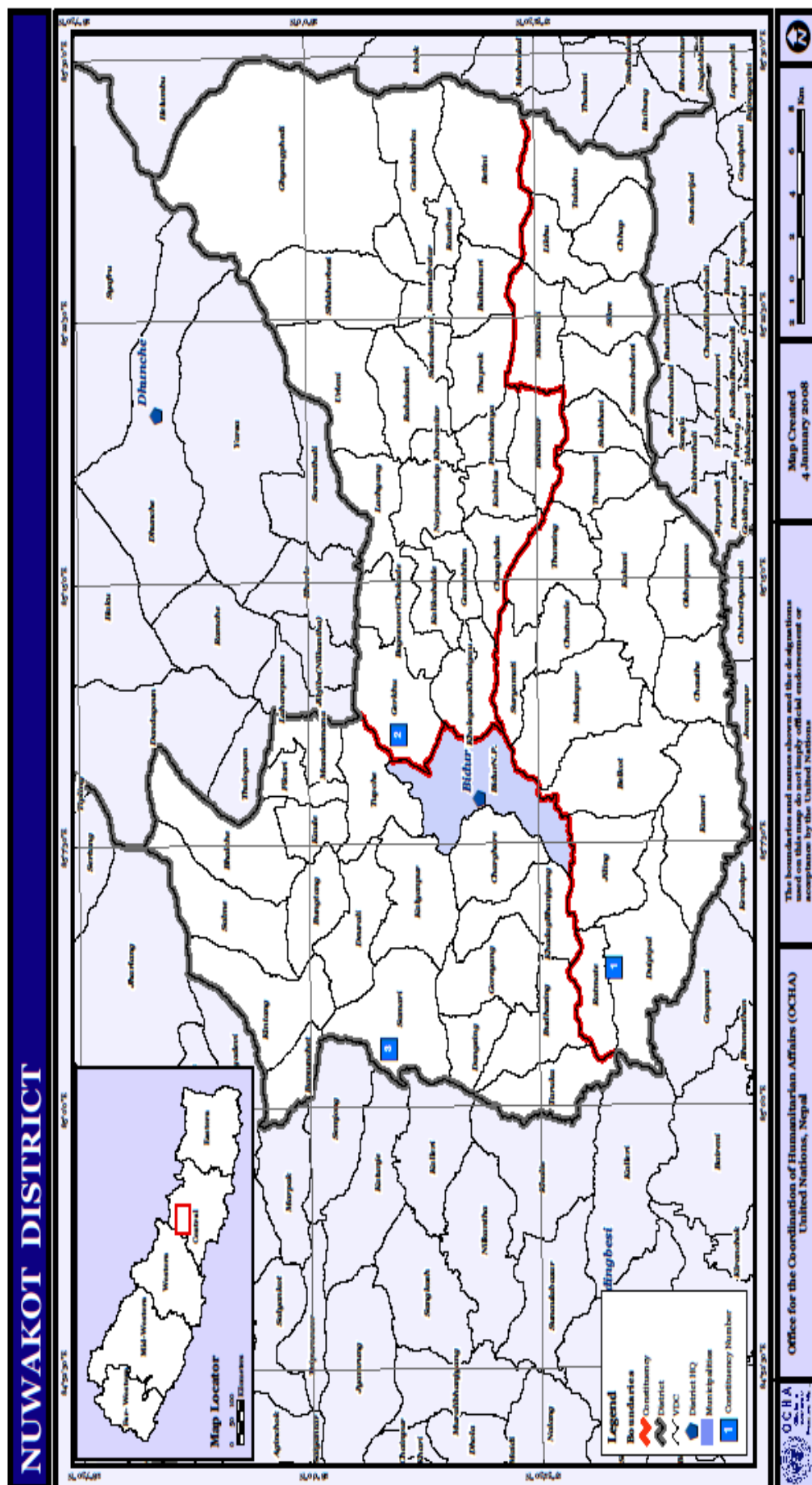
Annex 2: Map of the districts

Map of Rasuwa





Map of nuwakot



### Annex: 3 Ethnicity code

#### जात/जाती समूह (Caste/Ethnicity Group)

कोड	समूह	जात/जाती	
		दलित	तराई
१	दलित	१. विश्वकर्मा (कामी, सुनार, ओड, घुर्ना, पार्की, टमटा), २. परियार (दमाई, दर्जी, सुचिकार, नगची, ठोली, हुडरके), ३. सार्की (मिजार, चर्मकार, भुला), ४. गन्धर्व (गाईने), ५. वादी	६. कलर, ७. ककोहिया, ८. कोरी, ९. खटिक, १०. खत्वे (मण्डल, खड्ग), ११. चमार (राम, मोची, हरिजन, रविदास), १२. चिडिमर, १३. डोम (मरिका), १४. तल्मा (लौती, दासा), १५. दुसाध (पासवान, हजरा), १६. धोवी (राजक) हिन्दु, १७. पत्थरकहा, १८. पासी, १९. बाँतर, २०. मुसहर, २१. मेस्तर (हलखोरा), २२. सरभङ्ग (सरवरिया) २३. सोनार, २४. लोहार, २५. नदुवा
२	जनजाति	१. शेर्पा, २. भोटे, ३. थकाली, ४. खोसी, ५. खलुङ, ६. छेत्री, ७. डोल्पो, ८. ताङ्ग, ९. तिब्बती, १०. लोचक, ११. लामा, १२. लोचक, १३. लोचक, १४. लोचक, १५. लोचक, १६. लोचक, १७. लोचक, १८. लोचक, १९. लोचक, २०. लोचक, २१. लोचक, २२. लोचक, २३. लोचक, २४. लोचक, २५. लोचक, २६. लोचक, २७. लोचक, २८. लोचक, २९. लोचक, ३०. लोचक, ३१. लोचक, ३२. लोचक, ३३. लोचक, ३४. लोचक, ३५. लोचक, ३६. लोचक, ३७. लोचक, ३८. लोचक, ३९. लोचक, ४०. लोचक, ४१. लोचक, ४२. लोचक, ४३. लोचक, ४४. लोचक, ४५. लोचक, ४६. लोचक, ४७. लोचक, ४८. लोचक, ४९. लोचक, ५०. लोचक, ५१. लोचक, ५२. लोचक, ५३. लोचक, ५४. लोचक, ५५. लोचक, ५६. लोचक, ५७. लोचक, ५८. लोचक, ५९. लोचक, ६०. लोचक, ६१. लोचक, ६२. लोचक, ६३. लोचक, ६४. लोचक, ६५. लोचक, ६६. लोचक, ६७. लोचक, ६८. लोचक, ६९. लोचक, ७०. लोचक, ७१. लोचक, ७२. लोचक, ७३. लोचक, ७४. लोचक, ७५. लोचक, ७६. लोचक, ७७. लोचक, ७८. लोचक, ७९. लोचक, ८०. लोचक, ८१. लोचक, ८२. लोचक, ८३. लोचक, ८४. लोचक, ८५. लोचक, ८६. लोचक, ८७. लोचक, ८८. लोचक, ८९. लोचक, ९०. लोचक, ९१. लोचक, ९२. लोचक, ९३. लोचक, ९४. लोचक, ९५. लोचक, ९६. लोचक, ९७. लोचक, ९८. लोचक, ९९. लोचक, १००. लोचक	१. शेर्पा, २. भोटे, ३. थकाली, ४. खोसी, ५. खलुङ, ६. छेत्री, ७. डोल्पो, ८. ताङ्ग, ९. तिब्बती, १०. लोचक, ११. लामा, १२. लोचक, १३. लोचक, १४. लोचक, १५. लोचक, १६. लोचक, १७. लोचक, १८. लोचक, १९. लोचक, २०. लोचक, २१. लोचक, २२. लोचक, २३. लोचक, २४. लोचक, २५. लोचक, २६. लोचक, २७. लोचक, २८. लोचक, २९. लोचक, ३०. लोचक, ३१. लोचक, ३२. लोचक, ३३. लोचक, ३४. लोचक, ३५. लोचक, ३६. लोचक, ३७. लोचक, ३८. लोचक, ३९. लोचक, ४०. लोचक, ४१. लोचक, ४२. लोचक, ४३. लोचक, ४४. लोचक, ४५. लोचक, ४६. लोचक, ४७. लोचक, ४८. लोचक, ४९. लोचक, ५०. लोचक, ५१. लोचक, ५२. लोचक, ५३. लोचक, ५४. लोचक, ५५. लोचक, ५६. लोचक, ५७. लोचक, ५८. लोचक, ५९. लोचक, ६०. लोचक, ६१. लोचक, ६२. लोचक, ६३. लोचक, ६४. लोचक, ६५. लोचक, ६६. लोचक, ६७. लोचक, ६८. लोचक, ६९. लोचक, ७०. लोचक, ७१. लोचक, ७२. लोचक, ७३. लोचक, ७४. लोचक, ७५. लोचक, ७६. लोचक, ७७. लोचक, ७८. लोचक, ७९. लोचक, ८०. लोचक, ८१. लोचक, ८२. लोचक, ८३. लोचक, ८४. लोचक, ८५. लोचक, ८६. लोचक, ८७. लोचक, ८८. लोचक, ८९. लोचक, ९०. लोचक, ९१. लोचक, ९२. लोचक, ९३. लोचक, ९४. लोचक, ९५. लोचक, ९६. लोचक, ९७. लोचक, ९८. लोचक, ९९. लोचक, १००. लोचक
३	मधेशी	१. यादव, २. तेली, ३. कलवार, ४. मुन्नी, ५. कोइरी, ६. कुर्मी, ७. कानु, ८. हनुवा, ९. हजाम/खान्ना, १०. बडही, ११. राजभार, १२. केवट, १३. मल्लाह, १४. मुनिया, १५. कुम्हार, १६. लोच, १७. बिड़/विण्ड, १८. गडरी/भेडियार, १९. गडरी/भेडियार, २०. माली, २१. कामर, २२. धुनिया, २३. वराय, २४. मूण्डा, २५. बडाई, २६. पञ्जाबी, २७. बंगाली, २८. मारवाडी, २९. नुराई, ३०. कायस्थ, ३१. राजपूत, ३२. जैन, ३३. ब्राम्हण (तराई), ३४. बानिया, ३५. अमात, ३६. कचवानिया, ३७. राजधोव, ३८. कुशवाहा	१. यादव, २. तेली, ३. कलवार, ४. मुन्नी, ५. कोइरी, ६. कुर्मी, ७. कानु, ८. हनुवा, ९. हजाम/खान्ना, १०. बडही, ११. राजभार, १२. केवट, १३. मल्लाह, १४. मुनिया, १५. कुम्हार, १६. लोच, १७. बिड़/विण्ड, १८. गडरी/भेडियार, १९. गडरी/भेडियार, २०. माली, २१. कामर, २२. धुनिया, २३. वराय, २४. मूण्डा, २५. बडाई, २६. पञ्जाबी, २७. बंगाली, २८. मारवाडी, २९. नुराई, ३०. कायस्थ, ३१. राजपूत, ३२. जैन, ३३. ब्राम्हण (तराई), ३४. बानिया, ३५. अमात, ३६. कचवानिया, ३७. राजधोव, ३८. कुशवाहा
४	मुस्लिम	१. मुस्लिम, २. चुराटे	१. मुस्लिम, २. चुराटे
५	ब्राम्हण/क्षेत्री	१. ब्राम्हण (पहाड), २. क्षेत्री (पहाड)	१. ब्राम्हण (पहाड), २. क्षेत्री (पहाड)
६	अन्य	१. ठकुरी, २. सन्ध्यासी/दशनामी	१. ठकुरी, २. सन्ध्यासी/दशनामी

Code	Group	Caste/Ethnicity	
		Hill	Teral
1	Dalit	1. Biswokarma (Kami, Sunar, Od, Chunara, Parki, Tamata), 2. Pariyar (Damai, Darjee, Suchikar, Nagarchi, Hudrake), 3. Sarki (Mijar, Charmakar, Bhul), 4. Gandharwa (Gaine), 5. Badi	6. Kalar, 7. Kakaliya, 8. Kori, 9. Khatik, 10. Khatwe (Mandal, Khadga), 11. Chamar (Ram, Mochi, Harijan, Rabidas), 12. Chidimar, 13. Dom (Marik), 14. Tatma (Tati, Das), 15. Dushad (Paswan, Hajara), 16. Dhobi (Rajak) Hindu, 17. Pattharkatta, 18. Pasi, 19. Batar, 20. Mushahar, 21. Mestar (Halkhor), 22. Sarbhanga (Sarbariya) 23. Sonar, 24. Lohar, 25. Natuwa
2	Janajati	1. Sherpa, 2. Bhote (Bhutia), 3. Thakali, 4. Byansi, 5. Wallung, 6. Chhailotan, 7. Dolpo, 8. Tangbe, 9. Tin Gaule Thakali, 10. Topkegola (Dhokpya) 11. Bara Gaunle Thakali, 12. Marphali Thakali, 13. Mugali, 14. Lhopa, 15. Lhomi (Shingsawa), 16. Siyar (Chumba), 17. Thudam, 18. Magar, 19. Tamang, 20. Newar 21. Rai, 22. Gurung, 23. Limbu 24. Bhujel, 25. Sunuwar, 26. Chepang, 27. Thami, 28. Yakkha, 29. Pahari, 30. Chhantyal, 31. Jirel, 32. Dura, 33. Lepcha, 34. Hayu, 35. Yehimo, 36. Kushbadia, 37. Kusunda, 38. Phree (Free), 39. Bankaria, 40. Baramo/ Baramu, 41. Larke, 42. Surel, 43. Kumal, 44. Majhi, 45. Danuwar, 46. Darai, 47. Bote, 48. Raji, 49. Raute	50. Tharu, 51. Dhanuk (Rajbanshi), 52. Rajbansi (Koch), 53. Satar/Santhali, 54. Jhagar/Jhangar, 55. Gangai, 56. Dhimal, 57. Tajpuriya, 58. Meche (Bodo), 59. Kisan
3	Madhesi	1. Yadav, 2. Teel, 3. Kalwar, 4. Sudhi, 5. Koiri, 6. Kurmi, 7. Kanu, 8. Haluwal, 9. Hajam/Thakur, 10. Badhae, 11. Rajbhar, 12. Kewat, 13. Mallah, 14. Nuniya, 15. Kumhar, 16. Kahar, 17. Lodha, 18. Binna (Bing/Binda), 19. Gaderi/Bhediyar, 20. Mali, 21. Kamar, 22. Dhunia, 23. Barae, 24. Munda, 25. Badai, 26. Panjabi, 27. Bangali, 28. Marwadi, 29. Nurang, 30. Kayastha, 31. Rajput, 32. Jaine, 33. Brahman (Teral) 34. Baniya, 35. Amat, 36. Kathawaniya, 37. Rajdhob, 38. Kushbaha, 39.	1. Muslim, 2. Churaute
4	Muslim	1. Muslim, 2. Churaute	
5	Brahman/Chhetri	1. Brahman (Hill), 2. Chhetri (Hill)	
6	Others	1. Thakuri, 2. Sanyasi/Dasnami	





# बोल्छुपठक लाम्जुको कारण

## Mechanism of injury

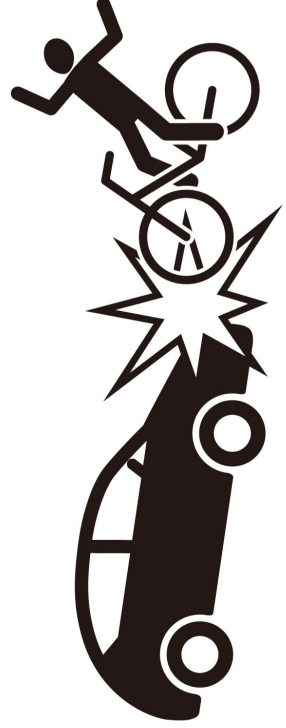
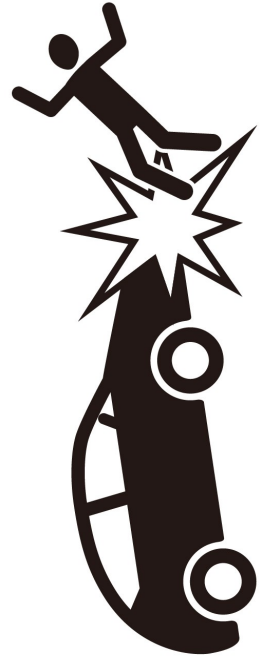
Created by Dr Hilary Wallace for 'Community-based injury survey with burns module pilot field test' (Nuwakot and Rasuwa districts, Nepal, 2016)  
[Email [hilary.wallace@uwa.edu.au](mailto:hilary.wallace@uwa.edu.au)].

Nepali hand-drawings by Mr Shyam Lama, Hetauda, courtesy of Dr Puspa Raj Pant, 'Community-based child injury prevention programme: Mother's Group Meeting facilitation manual for FCHVs' (Makwanpur Nepal– Pilot Programme) [Email [pant.puspa@gmail.com](mailto:pant.puspa@gmail.com)].



# सडक दुर्घना

Traffic accident





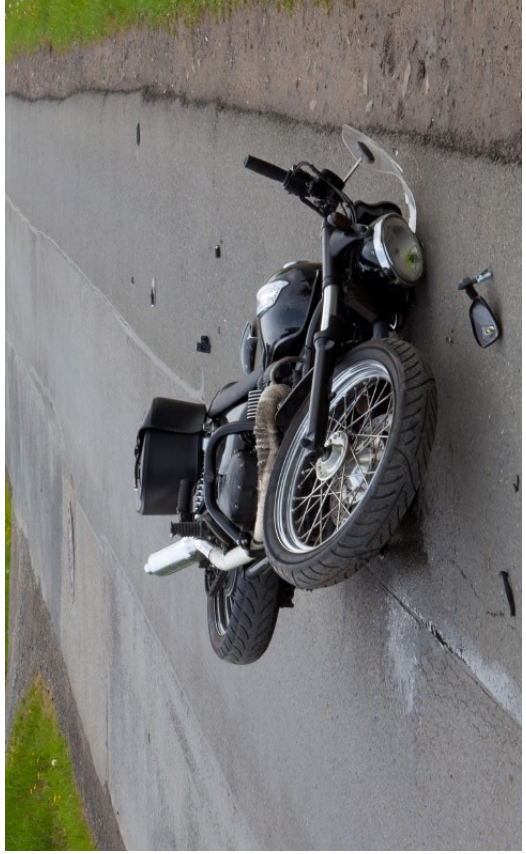
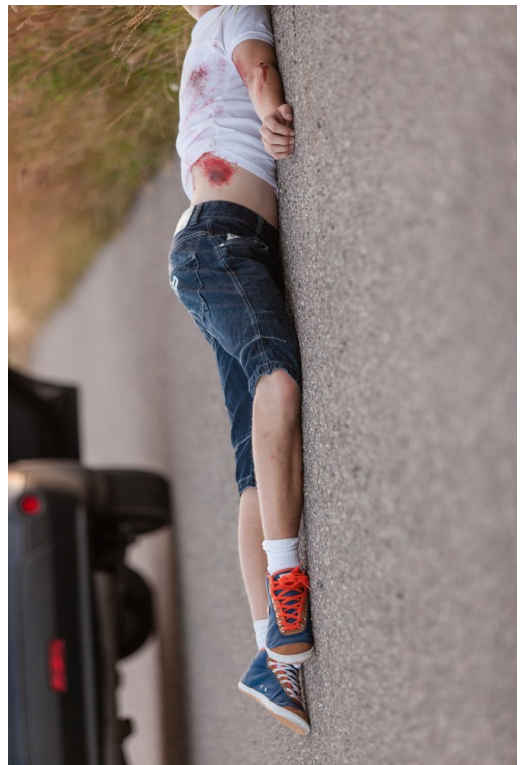
# गिरसासीनु वा अण्डै डुबनु / Suffocation /choking /near drowning





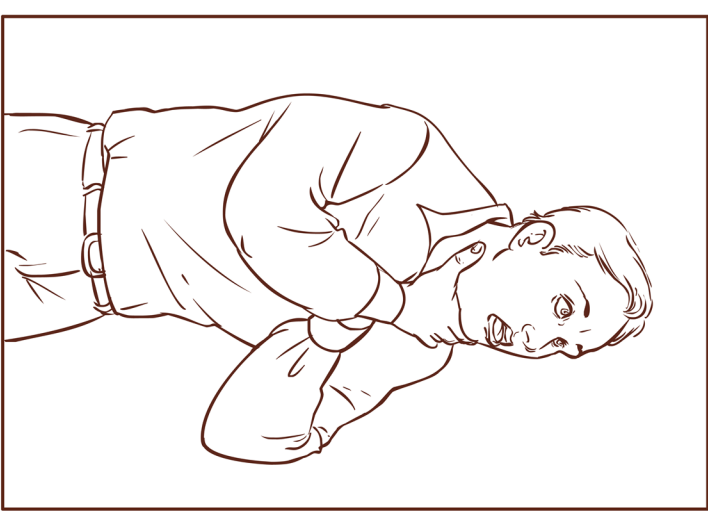
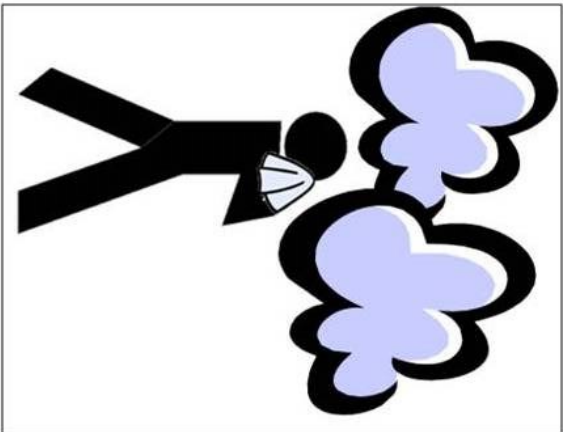
# सडक दुर्घटना

Traffic accident

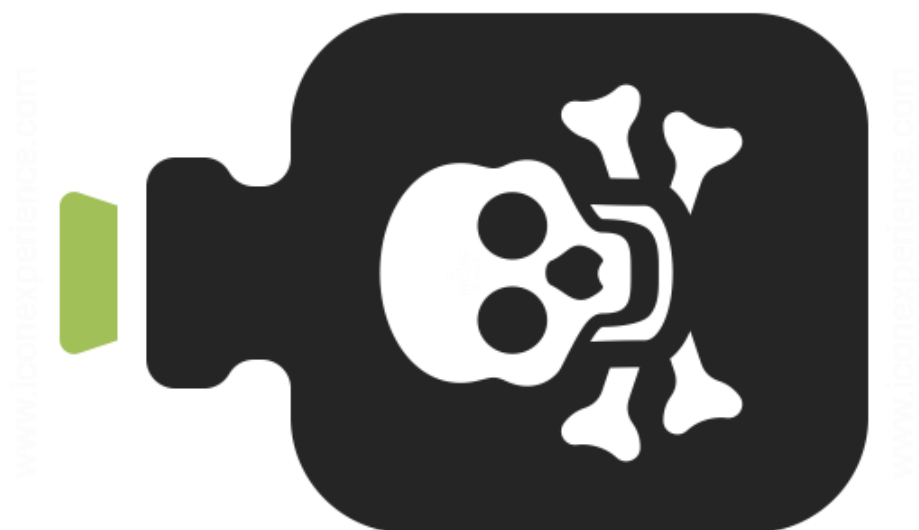


# ਜਿਰਸਾਸੀਨੁ ਵਾ ਅਧੈ ਫੁਭਨੁ / Suffocation /choking /near drowning

ਸ਼ਵਾਸ ਫੇਰ੍ ਜਸਕੇਰ ਜਿਰਸਾਸੀਨੁ / The person cannot breathe because air cannot get into the body.



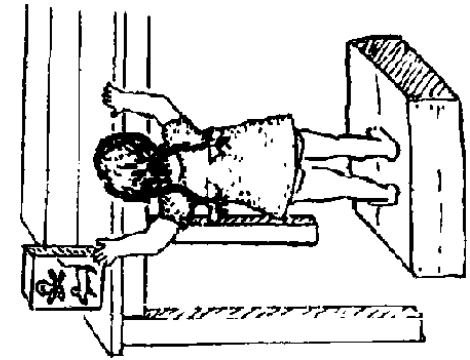
## विष सेवन





## શિશી અફઝાલા લાગે ચોતપટક / Internal injury





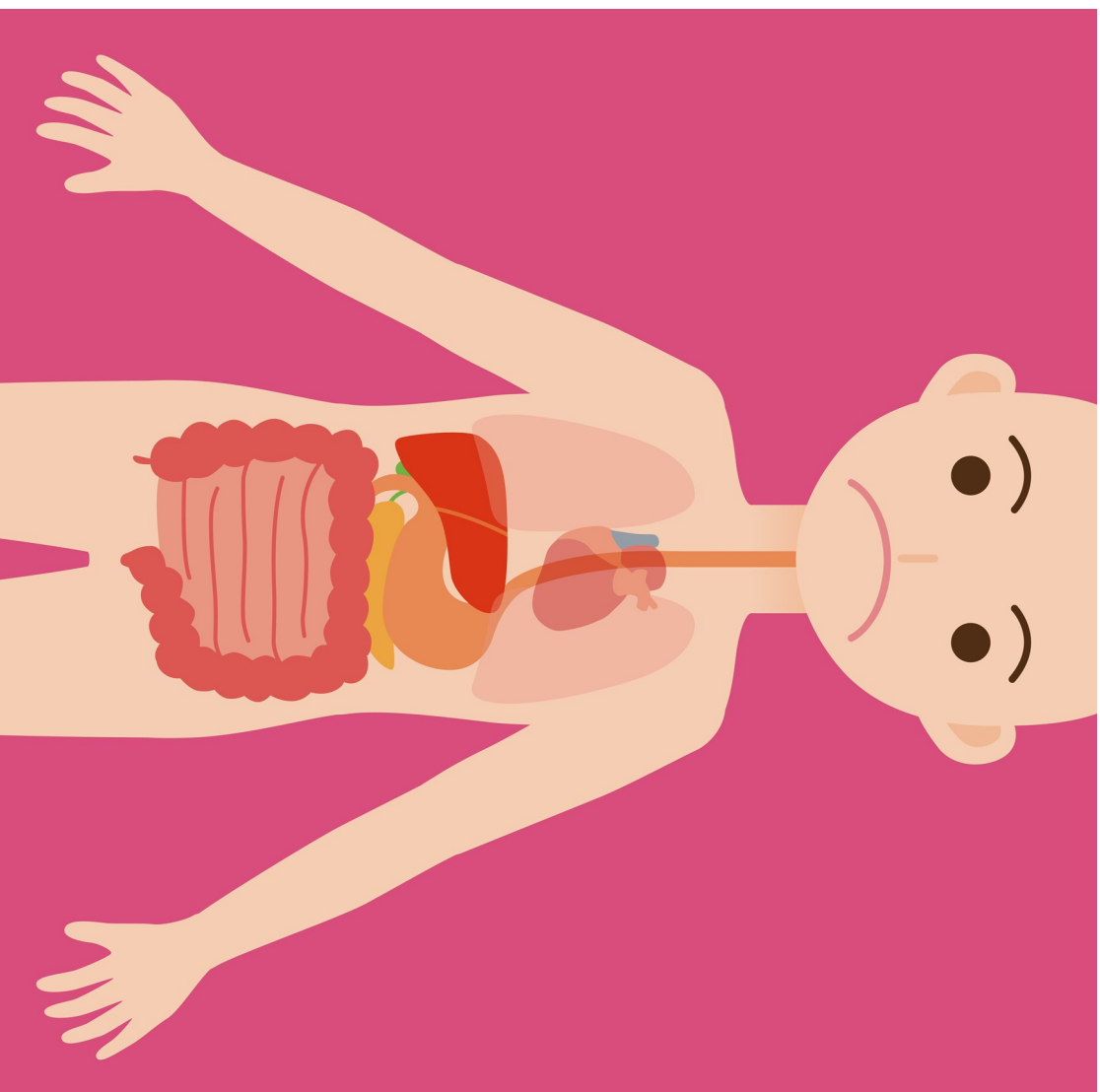
विष सेवन



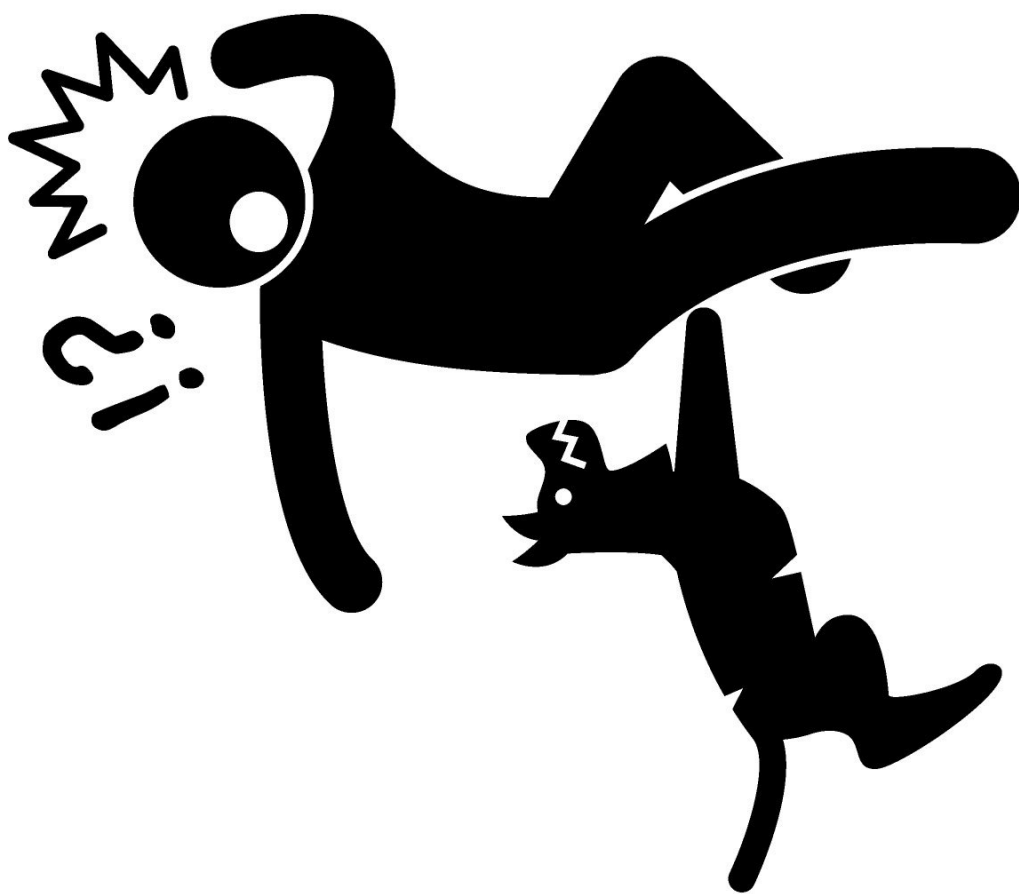
## शरीरको अङ्गहरूमा लाग्ने चोटपटक / Internal injury

शरीरको अङ्गहरूमा चोटपटक लाग्नु

Damage to the inside organs of the body (bleeding etc.) due to external forces.



**जनावरको ठोकाई / आक्रमण**  
**Animal bite/attack**



## आक्षिरकका जाओको चोट / Concussion/head injury





## जनावरको ठोकाई /आक्रमण Animal bite/attack



कुकुरले टोक्ने



कुकुरले टोक्ने

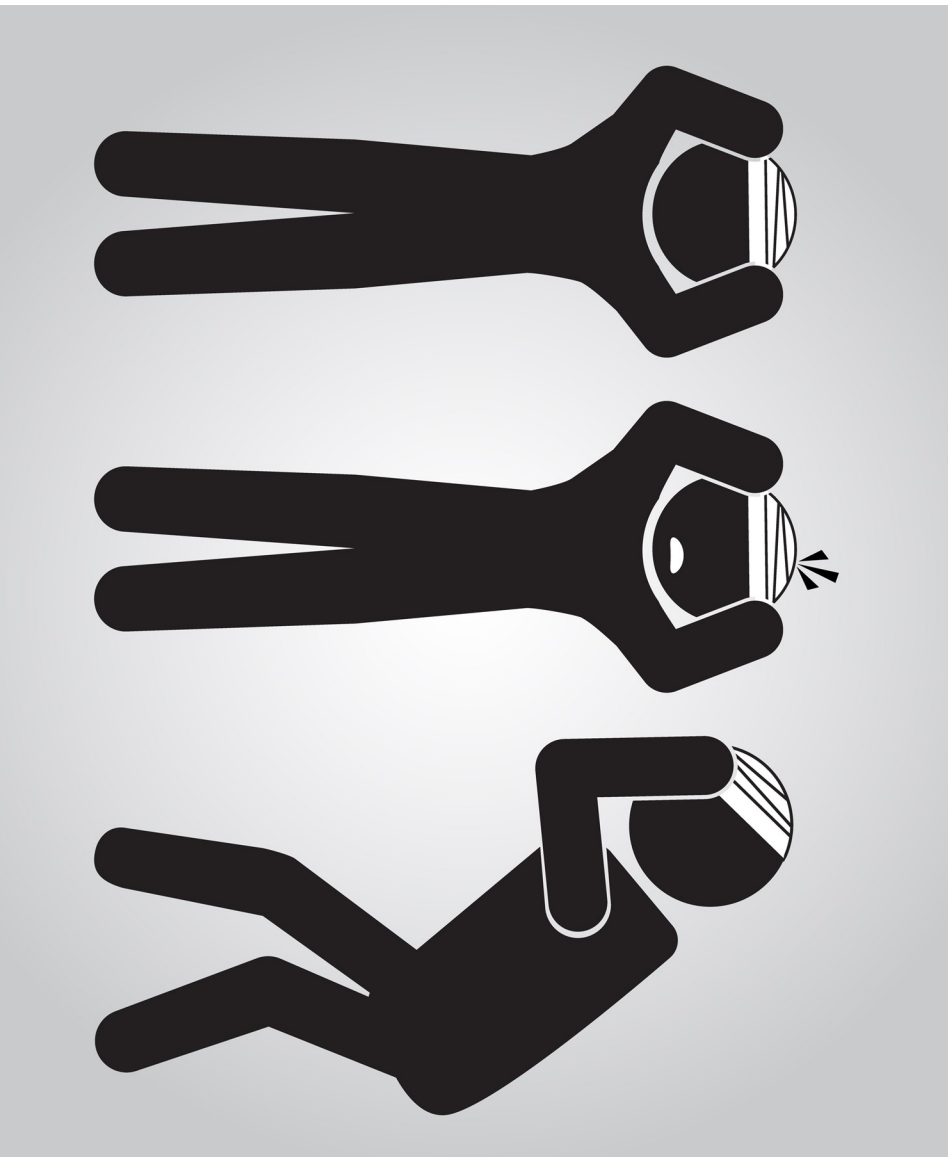


बाँदरले चिथोर्ने/ ठोक्ने

## मस्तिष्कमा लागेको चोट / Concussion/head injury

दाउरोमा लागेको धक्काले रिङ्गाला लाग्नु वाक्काकी लाग्नु वा बेहोश हुनु ।

A blow to the head caused dizziness, confusion, nausea or unconsciousness



# पानीमा डुबेर



## વિષ લાગ્જુ /Poisoning



# पानीमा डुबेर



जस्मा भएको पानी



पानीको खाल्डो





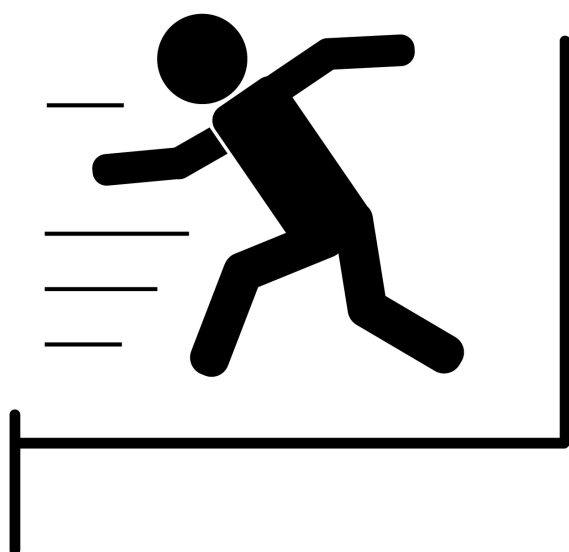
## विष लाग्नु / Poisoning

कुकुनै पति विषावत रसाय वस्तु, औषधी वा जनावर अथवा बोट विरुवाको विष लाग्नु /  
Exposure to dangerous chemicals, medicines, animals and plants .



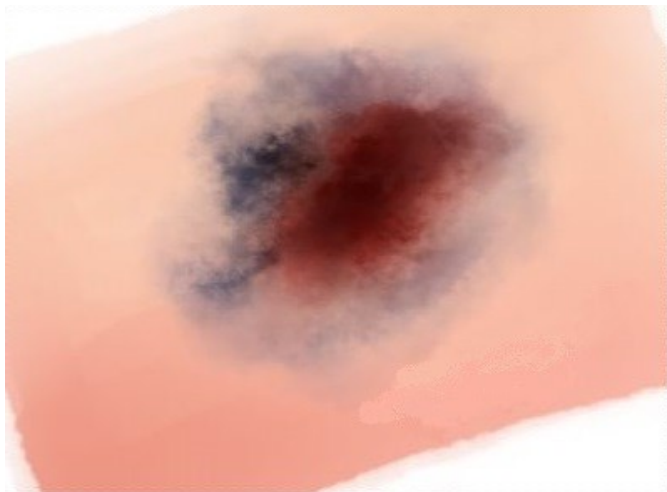


लड़कें



## नील डाग हुन / Bruise or superficial injury

चोटपकको कारण क्षालाका नील डाग हुनु तर कुनै रगत नबग्नु वा क्षाला नट्यातिनु  
The skin changes colour (e.g. blue or purple) from damage, but it is  
not broken or bleeding.





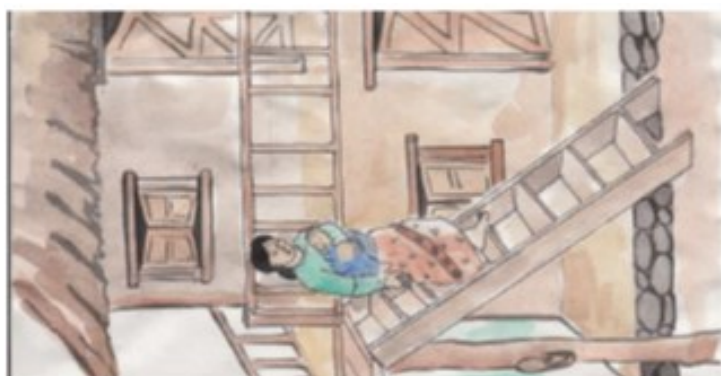
२५



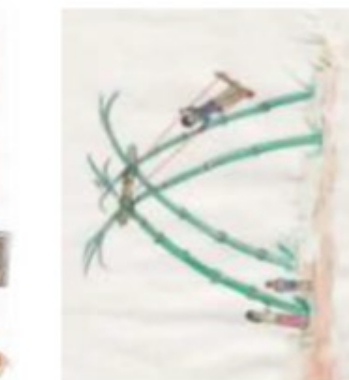
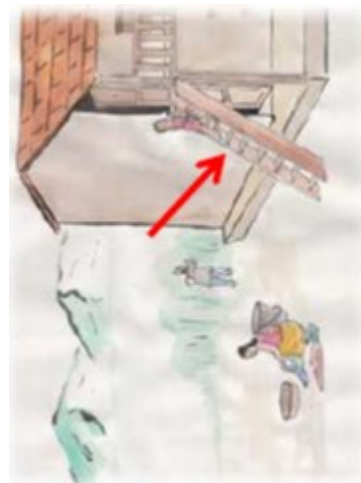
॥



साइकलबाट लड्ने



रुखवाट लडुकी



अरली ठाउँबाट लख्ने



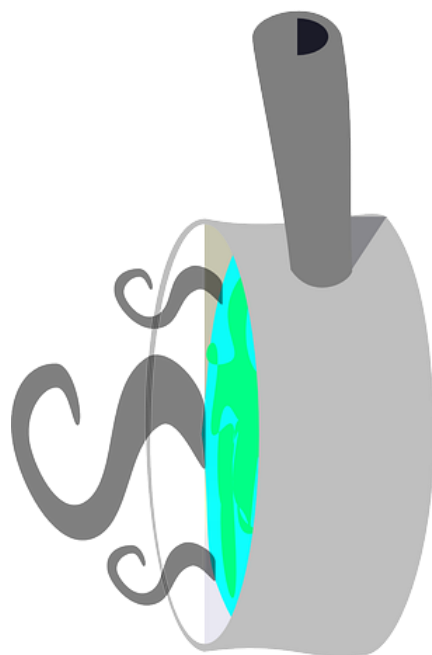
यातायात दुर्घटना

**काठिनु वा ठेकिनु अन्ध घाँउ हुन  
Cut, bite or other open wound**



आगो, फिटरका वा तातो वस्तुले पोलेको

**Fire, flames or heat**

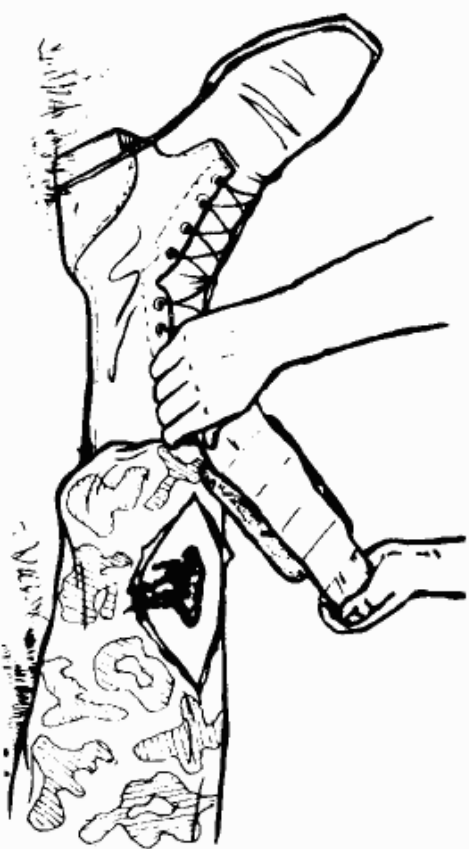
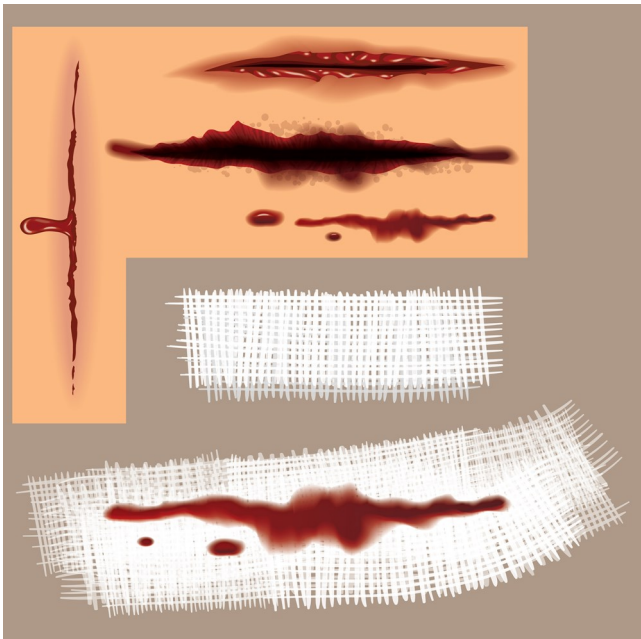




काटिनु वा ठेकिनु अन्ध घाँउ हुन

**Cut, bite or other open wound**

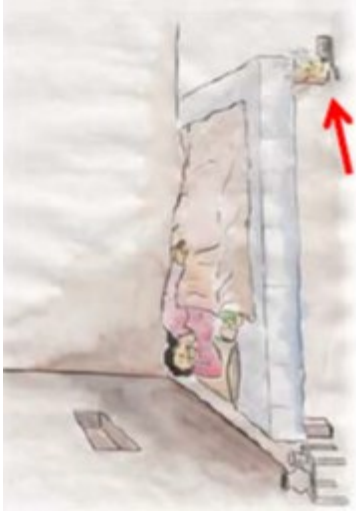
Skin is broken and there is usually bleeding.



# आगो, फिक्का वा तातो वस्तुले पोलेको Fire, flames or heat



आगो



तातो पानीले पोलिने



आगोसँग खेल्निरहेको



आगोले पोलिने

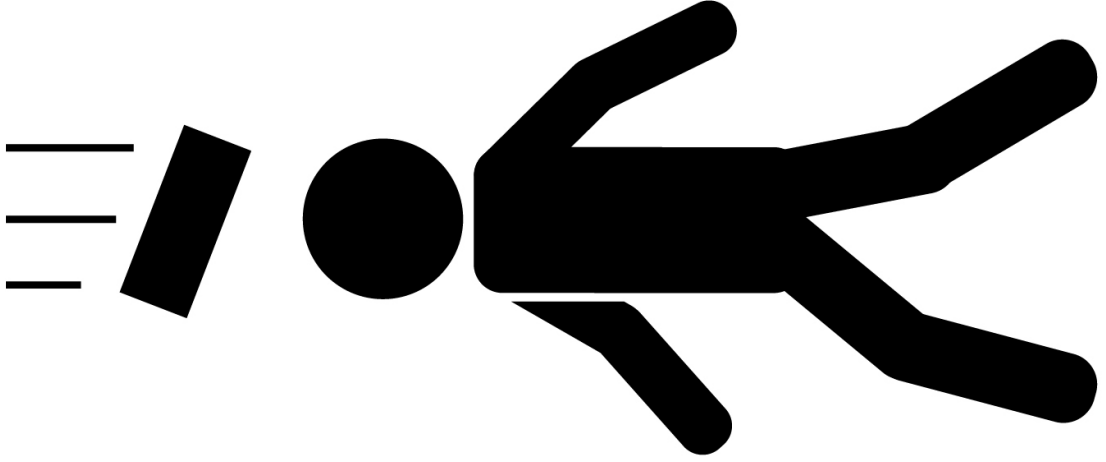


## ઝાડિયું વા ત્હડી સુસ્કીનું Sprain/Dislocation



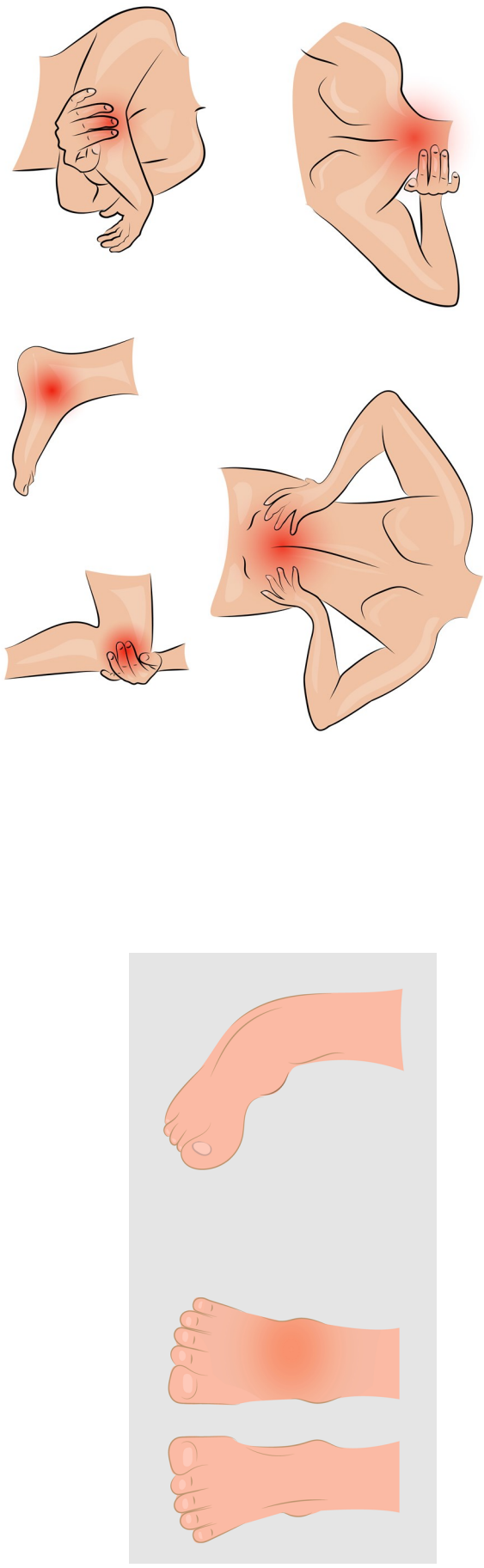
कुनै मान्छे वा वस्तुले प्रहार गरेको

Struck/hit by person or object



## ઝાકિવું વા ફડડી સુસ્કીવું Sprain/Dislocation

જોર્જી તથા ઝાંશપેશીમા વોટ લાગવું તર ફડડી જઘાંટિવું / Joint or muscle is damaged but no bones are broken (includes limbs, neck or back)





कुनै माण्डे वा वस्तुले प्रहार गरेको  
Struck/hit by person or object



जनावरले हिकुडने



वस्तुले लागेको



वस्तुले लागेको



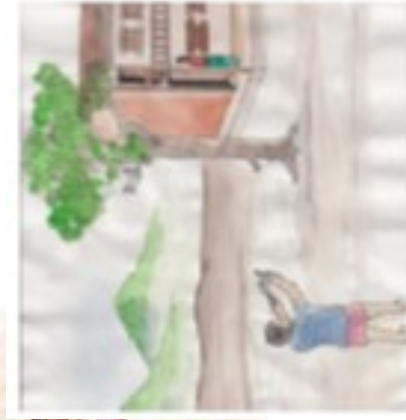
ढोकाेले च्यापेर



माण्डेले हिकुडिएको

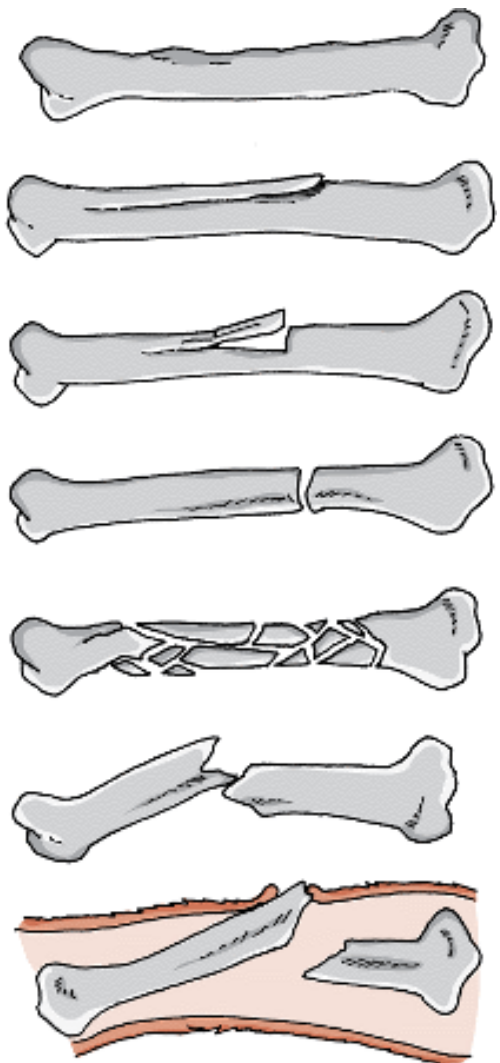


धारिला / औजारहरू



गुलेली खेलेको

शरीरको कुनै हड्डी ॲँचिनु / Any bone of the body was broken.



धारिलो वस्तुले काटेको / धोपेको

Stab or cut

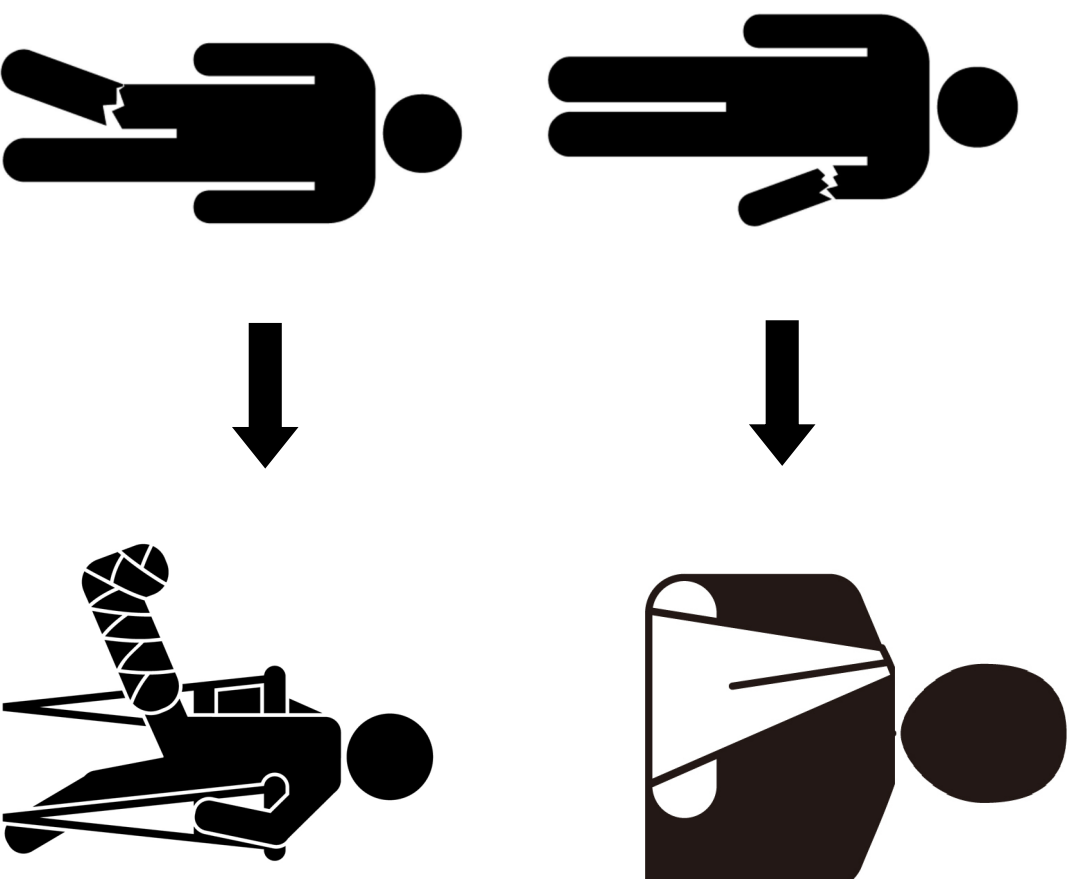


धारिलो हतियार खेल्ने



## हड्डी ओँचिनु Fracture

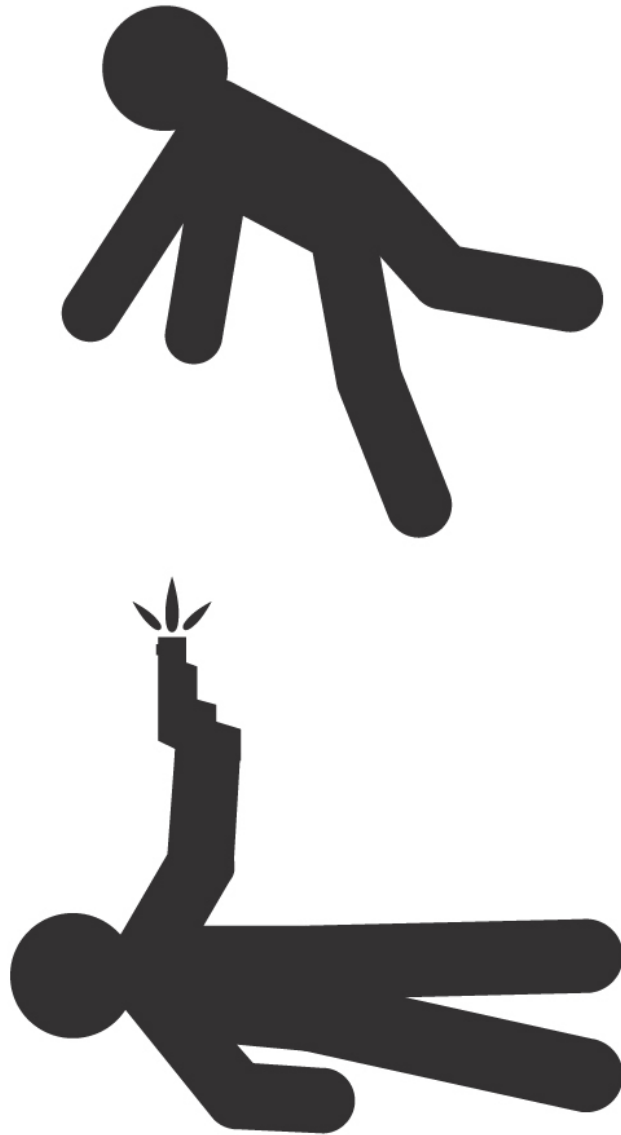
शरीरको कुनै हड्डी ओँचिनु / Any bone of the body was broken.



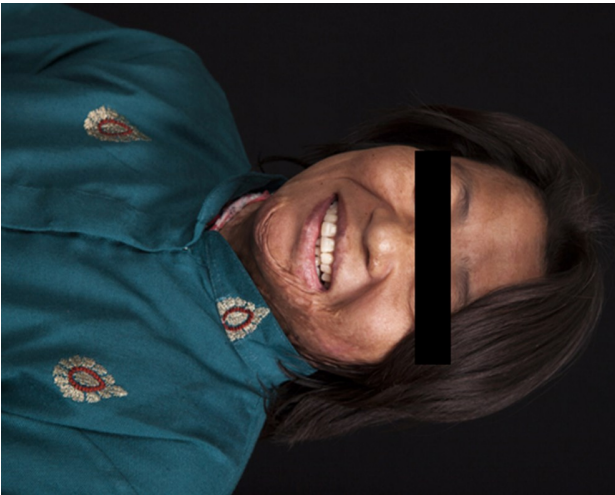


गोलिले लागेको

Gun Shot



**Burn injury**



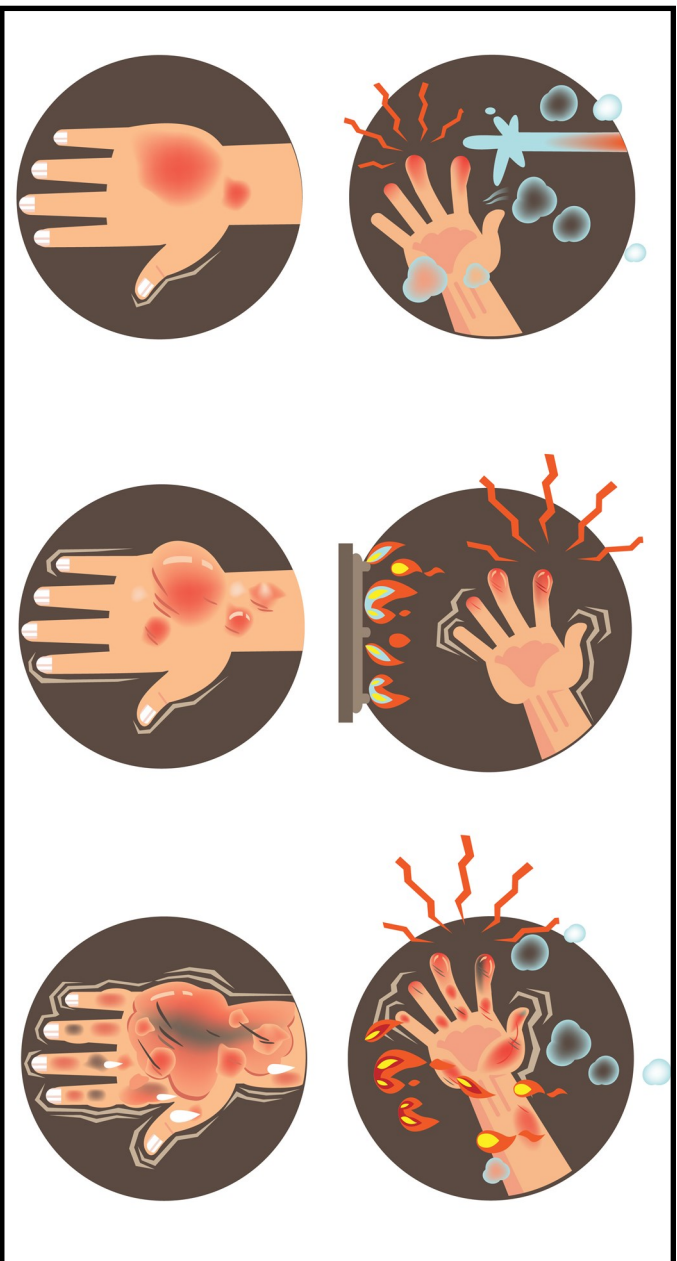
# विद्युतिथ Electrical



आगोले / तातो वस्तुले पोलेको वा रसायन वा विद्युतिच करेन्ट

## Burn injury

The skin was damaged by heat (hot liquid, flames/fire, hot object), electricity or chemicals.



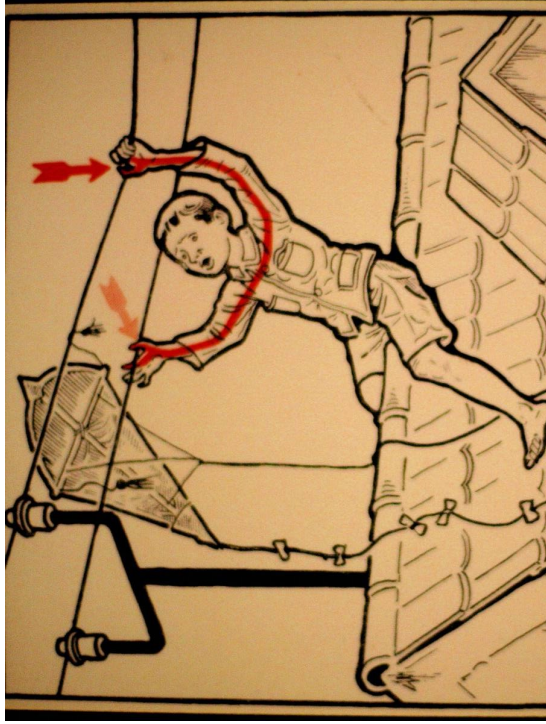


# विद्युतिच चोटपठक

## Electrical Shock



करेन्ट लागेको



करेन्ट लागेको



# **वैद्युतचक्को प्रकृति र प्रकार**

## **Nature of injury / (Type of injury)**

## PPI® Scorecard for Nepal

Entity	Name	ID	Date (DD/MM/YY)
Participant:			Date joined:
Field agent:			Date scored:
Service point:			# household members:

Indicator	Response	Points	Score
1. How many household members are there?	A. Eight or more	0	
	B. Seven	6	
	C. Six	8	
	D. Five	12	
	E. Four	19	
	F. Three	30	
	G. One or two	34	
2. In what type of job did the male head/spouse work the most hours in the past seven days?	A. No male head/spouse	0	
	B. Does not work, or paid wages on a daily basis or contract/piece-rate in agriculture	0	
	C. Paid wages on a daily basis or contract/piece-rate in non-agriculture	4	
	D. Self-employed in agriculture	5	
	E. Self-employed in non-agriculture	7	
	F. Paid wages on a long-term basis in agriculture or non-agriculture	8	
3. How many bedrooms does your residence have?	A. None	0	
	B. One	2	
	C. Two	7	
	D. Three or more	11	
4. Main construction material of outside walls?	A. Bamboo/leaves, unbaked bricks, wood, mud-bonded bricks/stones, or no outside walls	0	
	B. Cement-bonded bricks/stones, or other material	6	
5. Main material roof is made of?	A. Straw/thatch, or earth/mud	0	
	B. Tiles/slate, or other	2	
	C. Wood/planks, or galvanized iron	6	
	D. Concrete/cement	7	
6. Does your residence have a kitchen?	A. No	0	
	B. Yes	5	
7. What type of stove does your household mainly use for cooking?	A. Open fireplace, mud, kerosene stove, or other	0	
	B. Gas stove, or smokeless oven	3	
8. What type of toilet is used by your household?	A. None, household non-flush, or communal latrine	0	
	B. Household flush	6	
9. How many telephone sets/cordless/mobile does your household own?	A. None	0	
	B. One	8	
	C. Two or more	14	
10. Does your household own, sharecrop-in, or mortgage-in any agricultural land? If yes, is any of it irrigated?	A. No	0	
	B. Yes, but none irrigated	3	
	C. Yes, and some irrigated	6	

## Nepal PPI®: Lookup Tables

*The following lookup tables convert PPI scores to the poverty likelihoods below each of the poverty lines.*

PPI Score	Food	100% National	150% National	200% National	USAID 'Extreme'
<b>0-4</b>	100.0	100.0	100.0	100.0	100.0
<b>5-9</b>	38.9	100.0	100.0	100.0	66.3
<b>10-14</b>	32.3	77.8	100.0	100.0	45.6
<b>15-19</b>	20.7	64.6	92.7	100.0	41.4
<b>20-24</b>	14.6	59.3	91.2	99.4	32.7
<b>25-29</b>	9.3	49.8	85.1	96.2	25.0
<b>30-34</b>	7.4	38.9	78.0	94.7	20.9
<b>35-39</b>	3.9	25.9	68.3	90.6	9.3
<b>40-44</b>	2.0	17.7	57.3	84.5	5.6
<b>45-49</b>	0.0	9.6	44.6	74.9	2.8
<b>50-54</b>	0.0	5.3	32.5	61.7	1.8
<b>55-59</b>	0.0	3.5	25.2	53.5	0.9
<b>60-64</b>	0.0	1.8	12.3	36.0	0.0
<b>65-69</b>	0.0	0.4	8.2	27.1	0.0
<b>70-74</b>	0.0	2.0	4.6	16.8	0.0
<b>75-79</b>	0.0	0.0	1.8	7.8	0.0
<b>80-84</b>	0.0	0.0	0.9	5.2	0.0
<b>85-89</b>	0.0	0.0	0.0	0.7	0.0
<b>90-94</b>	0.0	0.0	0.0	0.0	0.0
<b>95-100</b>	0.0	0.0	0.0	0.0	0.0

# Community - based Injury Survey with Burns Module – Pilot field test

## INTRODUCTION AND INFORMED CONSENT FORM<sup>1</sup>

My name is \_\_\_\_\_. I am here on behalf of HERD International. HERD International is a private company registered under Office of the Company Registrar, Ministry of Industry, Nepal to promote evidence informed policies and practices for sustainable development to improve quality of life. Presently, we are conducting this survey on injuries.

The main objective of this survey is to understand how big the problem of injuries is, how injuries may have affected your family, what causes them, and what kind of health care is needed. To get this information, we are carrying out household interviews in this community. The results from this project will be used to help agencies and officials decide on what needs to be done about the problem and assess whether health services to treat injured people are adequate.

This interview will take about 30 minutes of your time and I would ask the questions somewhere quiet and private.

What you or your family members tell me will be kept strictly confidential. This information will be kept securely and no one outside of this project will find out the answers that you or your family give me. During the course of the interview, I will record the answers down on the tablet so that no information gets lost but I will not ask your name so that none of this information can be traced back to you. The results will not be reported as individual cases, but only as overall results for the community.

You are free to stop the interview at any point, or to not answer any of the questions that we ask.

If you have any questions, please free to ask anytime.

Do you have any questions? Yes ☐ No ☐

Do you agree to participate in this interview? Yes .....1 [Proceed the Interview]

No.....2 [Stop the interview]

\_\_\_\_\_  
Signature of the respondent

\_\_\_\_\_  
Date

<sup>1</sup> The suggested model is included in Sethi D, Habibula S, McGee K et al. (editors) (2004) Appendix 6 Model Introduction and Consent Form. In *Guidelines for Conducting Community Surveys on Injuries and Violence* (p. 105), World Health Organization, Geneva. [http://www.who.int/violence\\_injury\\_prevention/publications/surveillance/06\\_09\\_2004/en/](http://www.who.int/violence_injury_prevention/publications/surveillance/06_09_2004/en/) (Accessed 31/03/2017).

Interviewer visits record	
Interview date	<div> <div></div> <div></div> </div> <div> <div></div> <div></div> </div> / <div> <div></div> <div></div> </div> /2016 DD / MM / YYYY
Name of interviewer	.....
Signature of interviewer	.....
Interview result	Interview completed .....01 Told to give the interview next time .....02 Refuse to give interview .....03 Interview incomplete .....04 (Specify) ..... Others (Specify) .....05

### Section 1: Identification of Cluster/Household

Q.N.	Question	Response	Code	Skip
1	Name of District	.....		
2	Name of Municipality/VDC	.....		
3	Ward number	<div></div> <div></div>		
4	Name of the household head	.....		
5	Sex of HH head	Male.....1 Female.....2		
6	Name of the Respondent	.....		
7	Age of the respondent	<div></div> <div></div>		
8	Sex of the respondent	Male.....1 Female.....2		

## SECTION A: HOUSEHOLD MODULE

### Objectives:

- To describe household demographic characteristics
- To identify household burn injury hazards
- To estimate mortality rate due to injury in the community
- To estimate the incidence of injuries in the community [Key indicators: incidence of road traffic accident; falls; burns; poisonings]

Respondent: Senior female or any knowledgeable person of the household 18 years of age or over.

### A1. Household characteristics

*This part of questionnaire is an example only and should be adapted to the local context. Consideration should be given to including questions about assets which allow calculation of a wealth/poverty index.*

*"I am going to ask you about some household details."*

Q.N.	Question	Response	Code	Skip
101 Caste/ Ethnicity	What is your caste/ethnicity?	Hill Dalit ..... Terai Dalit..... Hill Janajati ..... Terai Janajati ..... Madhesi..... Muslim..... Brahmin/Chettri ..... Others(Specify) .....	01 02 03 04 05 06 07 96	
102_PPI1 Household size	How many household members are there?	Eight or more..... Seven..... Six ..... Five ..... Four ..... Three ..... One or two.....	01 02 03 04 05 06 07	
102_PPI2 Income source	In what type of job did the male head/spouse work the most hours <u>during</u> the past seven days?	No male head/spouse ..... Does not work, or paid wages on a daily basis or contract/piece-rate in agriculture.. Paid wages on a daily basis or contract/piece-rate in non-agriculture ..... Self-employed in agriculture ..... Self-employed in non-agriculture..... Paid wages on a long-term basis in agriculture or nonagriculture.....	01 02 03 04 05 06	
102_PPI3 Bedrooms	How many bedrooms does your residence have?	None ..... One ..... Two ..... Three or more .....	01 02 03 04	

102_PPI4 Outside walls	Main construction material of outside walls?	Bamboo/leaves, unbaked bricks, wood, mud-bonded bricks/stones, or no outside walls ..... 01 Cement-bonded bricks/stones, or other material ..... 02 Others (specify) ..... 96	
102_PPI5 Roof material	Main material roof is made of?	Straw/thatch, or earth/mud ..... 01 Tiles/slate, or other ..... 02 Wood/planks, or galvanized iron ..... 03 Concrete/cement ..... 04 Others (specify) ..... 96	
102_PPI8 Toilet	What type of toilet is used by your household?	None ..... 01 household non-flush, or communal latrine ..... 02 Household flush ..... 03	
102_PPI9 Phones	How many telephone sets/cordless/mobile does your household own?	None ..... 01 One ..... 02 Two or more ..... 03	
102_PPI10 Land	Does your household own, sharecrop-in, or mortgage-in any agricultural land? If yes, is any of it irrigated?	No ..... 01 Yes, but none irrigated ..... 02 Yes, and some irrigated ..... 03	
103	Where is your family living since the earthquake?	Same house as before earthquake ..... 01 Reconstructed (new) house on same land ..... 02 Rented house on a different piece of land ..... 03 Institutional shelter ..... 04 Relative/friend's house ..... 05 Temporary shelter/tarpaulin ..... 06 Other (specify) ..... 96	



## A2. Household energy use and supplementary information

"The next questions are about cooking and the types of fuel and energy sources you use in the home."

Q.N.	Question	Response	Code	Skip
106_PPI7	What type of stove did your household mainly use for cooking?	<a href="#">Traditional open-fire stove (mud, 3-stones, iron rods etc.)</a> ..... 01 Kerosene stove ..... 02 Gas stove ..... 03 Improved/ <a href="#">manufactured</a> cookstove.. 04 No cooking at household ..... 05 Others (specify) ..... 96	01 02 03 04 05 96	→ <a href="#">106b</a> → <a href="#">111</a>
<b>106 b</b> <a href="#">Cookstove</a>  <b>106bi</b>  <b>106bii</b>	<a href="#">Tell me about the improved/manufactured cookstove. (Refer to Q 106 to complete this question.) Is it:</a> <a href="#">With a chimney, flue or vent?</a>  <a href="#">With a fan?</a>	<a href="#">Yes</a> ..... <a href="#">01</a> <a href="#">No</a> ..... <a href="#">02</a>  <a href="#">Yes</a> ..... <a href="#">01</a> <a href="#">No</a> ..... <a href="#">02</a>	01 02  01 02	
107  Cooking fuel	What type of fuel does your household mainly use for cooking?	Electricity ..... 01 Solar ..... 02 LPG /cooking gas ..... 03 Biogas ..... 04 Kerosene ..... 05 Charcoal ..... 06 Coal ..... 07 Wood/firewood ..... 08 Animal dung/waste ..... 09 Crop residues/grass/straw/shrubs... 10 Other (specify) ..... 96	01 02 03 04 05 06 07 08 09 10 96	
108  Other fuels for cooking	Does your household use anything else for cooking? If yes, what types of fuel? ( <b>circle all others used</b> )	Electricity ..... 01 Solar ..... 02 LPG /cooking gas ..... 03 Biogas ..... 04 Kerosene ..... 05 Charcoal ..... 06 Coal/lignite ..... 07 Wood/firewood ..... 08 Animal dung/waste ..... 09 Crop residues/grass/straw/shrubs... 10 Other (specify) ..... 96	01 02 03 04 05 06 07 08 09 10 96	
109  Cooking location	Where is cooking usually performed?	Inside the house ..... 01 In a separate building ..... 02 Outdoors ..... 03 Other (Specify) ..... 04	01 02 03 04	→ <a href="#">111</a>
110_PPI6 Separate kitchen	Do you have a separate room which is used as a kitchen?	Yes ..... 01 No ..... 02	01 02	

<b>111</b> Source of light	What is the main source of light at your house in the evening? <b>(select one only)</b>	No lighting ..... 01 Electricity ..... 02 Solar home system..... 03 Generator ..... 04 Solar Lantern..... 05 Battery flashlight, torch ..... 06 Gas lamp ..... 07 Kerosene Lamp ..... 08 Oil lamp ..... 09 Candle ..... 10 Other (specify) ..... 96	
<b>112</b> Water heating	What does your household mainly use for heating water for bathing when needed? <b>(select one only)</b>	Water not heated ..... 01 Solar water heater ..... 02 Electric water heater..... 03 LPG water heater(Geyser) ..... 04 Cookstove (used to heat water)..... 05 Other (specify) ..... 96	If 04 go to 113, if not skip to 114
<b>113</b> Gas geyser location	Is the gas geyser located inside the bathroom? <b>(enumerator to observe)</b>	Yes ..... 01 No..... 02	
<b>114</b> Home heating methods	What does your household mainly use for space heating when needed? <b>(select one only)</b>	No heating ..... 01 Electric heater ..... 02 Gas space heater ..... 03 Kerosene heater ..... 04 Coal or lignite ..... 05 Charcoal ..... 06 Wood/firewood ..... 07 Processed biomass (pellets) or woodchips/ briquette..... 08 Other (specify) ..... 96	A2_S1
<b>115</b> Space heater	Tell me about the space heater. (Refer to Q 114 to complete this question) Is it:		
<b>115a</b>	Traditional/open fire or manufactured?	Traditional/open fire ..... 01 Manufactured ..... 02	
<b>115b</b>	With a chimney, flue or vent?	Yes ..... 01 No..... 02	
<b>115c</b>	With a fan?	Yes ..... 01 No..... 02	

A2. Supplementary information		
<b>A2_S1</b>	What is the best first aid for someone who has just been burned by heat or fire?	(Free text)..... ..... Don't know..... 98 Refused ..... 99
Burn first aid		

### A3. Injury-related deaths

*"People can be injured by accident or on purpose. They may have hurt themselves or others may have caused them to be hurt. These next questions are about injuries that have happened to people living in your house." (Note to interviewer: Please explain again what is meant by the word "injury". An injury is **any physical damage to the body such as a wound, bruise, burn, fracture, internal injury, poisoning, loss of consciousness due to a blow to the head, suffocation/strangulation**. Injuries can result from a falling building, a road traffic accident, a fall, fire or heat, electrocution, poisoning, drowning, gun shot, sharp instrument such as a knife or an animal bite, chemicals or acid on the skin, or toxic fumes.)*

Q.N.	Question	Response	Code	Skip
<b>116</b> Injury deaths	Has anyone who normally lived in this household died from an injury in the last 5 years?	Yes..... No ..... Refused.....	01 02 03	123
<i>I'm very sorry to hear that you lost a household member. The following questions are about this/these deceased person/s.</i>				
<b>117</b> Number of injury deaths	Could you please tell me how many members of your household died from an injury in the last 5 years?	<input type="text"/> <input type="text"/>		
	<i>Ask the following questions for each member that has died from an injury in the last 5 years.</i>	I	II	III
<b>118</b> Nature of injury causing death (WHO 1.2.3) <sup>2</sup>	What caused the injury that they died from? Traffic accident.....01 Fall.....02 Struck/hit by person or object.....03 Stab.....04 Gun shot.....05 Fire, flames or heat.....06 Drowning.....07 Poisoning.....08 Animal bite/attack.....09 Electrical shock.....10 Other (Specify).....96 Don't know.....98 Refused.....99	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>

<sup>2</sup> Reference to WHO survey question numbers are included where appropriate from Sethi D, Habibula S, McGee K et al. (editors) (2004) *Guidelines for Conducting Community Surveys on Injuries and Violence* (p. 105), World Health Organization, Geneva. [http://www.who.int/violence\\_injury\\_prevention/publications/surveillance/06\\_09\\_2004/en/](http://www.who.int/violence_injury_prevention/publications/surveillance/06_09_2004/en/) (Accessed 31/03/2017).

<b>118a</b> Earthquake	Did the death happen as a result of the earthquakes in April-May 2015?	Yes.....01 No.....02 Don't know.....98 Refused.....99	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
<b>119</b> Intent (WHO 1.2.4)	How did the injury happen? It was an accident (unintentional) .....01 Someone else did it to them <a href="#">on purpose</a> . 02 They did it to themselves <a href="#">on purpose</a> .....03 Don't know.....98 Refused.....99	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<b>120</b> Age at death (WHO 1.6.1)	Do you know the complete age of injured person when he/she was hurt?	Yes.....01 Don't know....98 Refused.....99	Yes.....01 Don't know....98 Refused.....99	Yes.....01 Don't know...98 Refused.....99	
<b>120_a</b> Age at death (WHO 1.6.1)	How old was the injured person when he/she was hurt? <b>(Record age in complete years; years and months if the person is 5 years or under)</b>	a) <input type="text"/> <input type="text"/> Years b) <input type="text"/> <input type="text"/> Months	<input type="text"/> <input type="text"/> Years <input type="text"/> <input type="text"/> Months	<input type="text"/> <input type="text"/> Years <input type="text"/> <input type="text"/> Months	
<b>120_b</b> <a href="#">Sex</a>	<a href="#">Was the person who died male or female?</a>	<a href="#">Male.....01</a> <a href="#">Female.....02</a> <a href="#">Third gender..03</a>	<a href="#">Male.....01</a> <a href="#">Female.....02</a> <a href="#">Third gender...03</a>	<a href="#">Male.....01</a> <a href="#">Female.....02</a> <a href="#">Third gender03</a>	
<b>121</b> Place of death (WHO 1.6.2)	Where did the injured person die? <b>Multiple answers possible (e.g. 01 &amp; 03)</b> At the place where the injury occurred ..01 At a health facility (e.g. hospital, clinic, health centre) .....02 At home .....03 Other (specify).....96 Don't know .....98 Refused .....99	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<b>122</b> Time of death (WHO 1.6.3)	How long after the injury occurred did the injured person die? Immediately .....01 Less than 1 hour after the injury .....02 Between 1 and 6 hours after the injury ..03 More than 6 hours but less than 12 hours after the injury .....04 Between 12 & 24 hours after the injury .05 More than 1 day but less than 1 week after the injury.....06 More than 1 week after the injury .....07 Other (specify).....96 Don't know .....98 Refused .....99	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	

#### A4: Household schedule and injury screening

123. These next questions are about injuries in the people now living in your household. (Note to interviewer: If necessary, explain again what is meant by the word "injury" if necessary and list some examples [show flip-chart](#).)

Q.N.	Question	Response	Code	Skip
123_a	Was anyone in this household injured during the 2015 earthquakes or has anyone been injured any time since the earthquake? (Serious enough to need some kind of medical treatment or to change their 'normal' activity for one or more days. For example: did not go to work or school, could not carry out household chores; did not play/feed/talk normally if they were a young child or baby.)	Yes ..... No .....	01 02	
123_b	How many household members stayed in your household last night?	<input type="text"/> <input type="text"/>		
<a href="#">Check A</a>	<a href="#">Insert total number of injured persons in household</a>	<a href="#">Copy total number of injured persons in household from Q 123_c</a>		

**Note: If "No" response in both Q 123\_a and Q 123\_b then End the interview.**

We will start by listing all the people who stayed in your house last night [Complete columns 1 to 4]. Now we will go through the list, person by person. Can you tell me whether each person had an injury **serious enough to need some kind of medical treatment or to change their 'normal' activity for one or more days since the first earthquake (April 25, 2015) onwards?** (For example: did not go to work or school, could not carry out household chores; did not play/feed normally if they were a young child or baby).

**Q.N. 123\_c**

S.N	Name (1)	Relationship with Respondent (2)	Age (years) [Years & months if <5 years] (3)	Sex 1: Male 2: Female 3: Third gender (4)	Was he/she injured during the 2015 earthquakes or any time since? (Serious enough to need medical treatment or to change their 'normal' activity for one or more days?)  1: Yes 2: No 98: Don't know  If 'No' or 'don't know', skip to next household member (5)
01		<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
02		<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
03		<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
04		<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
05		<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
06		<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>

07		<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
09		<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
10		<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
<b>2) Relationship</b> 01: Self 02: Spouse 03: Son / daughter 04: Daughter-in-law 05: Grandchild 06: Parent 07: Parent-in-law 08: Co-wife 09: Brother/Sister 10: Other relative/Guest 11: Not related/Guest					

*If no injury events in household members from the time of the earthquake onwards → End.*

*Please ensure to complete Section B for each person with 'Yes' (01) in Column 5.*

**SECTION B: INJURY MODULE** Complete Section B for **the most serious injury event** of each person with an injury (Q123\_c Column 5 = 'Yes' [01]).

Objectives:

- To explore the cause of injuries; in particular, burn injuries
- To explore risk factors for injuries; in particular, burn injuries
- To explore treatment and impact of injuries; in particular, burn injuries

Respondents:

1. Injury victim (if present at time of interview, current age  $\geq 18$  years and is able to understand and/or respond to the questions)
2. Another knowledgeable HH member (proxy) if victim < 18 years, is not present, or is unable to understand and/or respond to the questions

Q.N.	Question	Response	Code	Skip
<b>Check 1</b>	Ensure whether the injured person is recorded as injured in HH roster, column 5. Copy household serial number from HH roster.	<input type="text"/> <input type="text"/>		
<b>Check 2</b> Nature (WHO 1.2.5)	Nature of physical injury <u>Multiple answers possible</u>	Fracture (broken bone)..... 01 Sprain/Dislocation ..... 02 Cut, bite or other open wound ..... 03 Bruise or superficial injury ..... 04 Burn..... 05 Poisoning ..... 06 Concussion/head injury ..... 07 Internal injury/internal organ injury ..... 08 Suffocation..... 09 Other (Specify)..... 96 Don't know ..... 98 Refused..... 99		
<b>Check 3</b>	Respondent	Victim (injured person) ..... 01 Proxy ..... 02		
<b>B1. INJURY EVENT</b>				
<b>201</b> Age (WHO 1.1.2)	How old was the injured person when he/she was hurt? <b>(Record age in complete years; years and months if the person is 5 years or under)</b>	<input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> Years Months		
<b>202</b> Sex (WHO 1.1.3)	Is the injured person male or female?	Male ..... 01 Female ..... 02 Third gender ..... 03		
<b>203</b> Occupation (WHO 1.1.5)	What is the injured person's current occupation?	Farmer..... 01 Civil servant (Government employee) ..... 02 Self-employed ..... 03 Street vendor..... 04 Professional ..... 05 Student..... 06 Homemaker..... 07		



Q.N.	Question	Response	Code	Skip
		Non-paid worker/volunteer ..... 08 Retired..... 09 Unemployed (able to work) ..... 10 Unemployed (unable to work)..... 11 Other (specify)..... 96 Don't know ..... 98 Refused..... 99		
<b>204</b> Date of injury	On what date did the injury occur?	<input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> MM                      YYYY Don't know ..... 98		
<b>205</b> Time of injury	At what time did the injury occur?	Morning (05:00-11:00)..... 01 Middle of the day (11:00-1300)..... 02 Afternoon (13:00-17:00) ..... 03 Evening (17:00-19:00)..... 04 Night (19:00-05:00) ..... 05 Don't know ..... 98 Refused..... 99		
<b>206</b> Place (Adapted from WHO 1.2.1)	Where was were the injured person when the injury occurred?	Home..... 01 School ..... 02 Street/highway..... 03 Residential institution ..... 04 Sports and athletic area ..... 05 Industrial or construction ..... 06 Farm (excluding home) ..... 07 Commercial area (shop, store, hotel, bar, office) ..... 08 Countryside ..... 09 Religious place ..... 10 Other (specify) ..... 96 Don't know ..... 98 Refused..... 99		
<b>207</b> Activity (Adapted from WHO 1.2.2)	What was the injured person doing when <u>they were</u> hurt?	Paid work (including travel to and from work) 01 Unpaid work (including household-related chores and travel to and from work) ..... 02 Education ..... 03 Sports..... 04 Leisure ..... 05 Sleeping ..... 06 Religious practice..... 07 Other vital activity (i.e. eating, drinking..... 08 Travelling..... 09 Unspecified activities (e.g. hanging around, doing nothing) ..... 10 Other (specify) ..... 96 Don't know ..... 98 Refused..... 99		

<b>208</b> Mechanism (WHO 1.2.3)	How was the injured person hurt?	Traffic accident ..... 01 Fall ..... 02 Struck/hit by person or object ..... 03 Stab ..... 04 Gun shot ..... 05 Fire, flames or heat ..... 06 Drowning or near-drowning ..... 07 Poisoning ..... 08 Animal bite/attack ..... 09 Electrical shock ..... 10 Other (Specify) ..... 96 Don't know ..... 98 Refused ..... 99	
<b>208a</b> Earthquake	Did the injury happen as a result of the earthquakes in April-May 2015?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	
<b>209</b> Intent (WHO 1.2.4)	How did the injury happen? Was it an accident, did someone do this to the injured person, or did the injured person do this to <u>themselves</u> ?	It was an accident (unintentional) ..... 01 Someone else did it to me <u>on purpose</u> (intentional) ..... 02 I did it to myself <u>on purpose</u> (intentional) ..... 03 Don't know ..... 98 Refused ..... 99	
<b>210</b> Use of alcohol (WHO 1.2.6)	In the 6 hours before the injured person was hurt, did <u>they</u> have any alcohol to drink? (even one drink) <i>Use precautions while asking to children under 16 years of age.</i>	Yes ..... 01 No ..... 02 Don't know/can't remember ..... 98 Refused ..... 99	
<b>B2. BURN INJURY EVENT (If SECTION B Check 2 = 06 (Burn) proceed with 211, or else go to Q224</b>			
<b>211</b> Activity- burn injury	What was the main event or activity contributing to the burn injury?	Cooking ..... 01 Heating/warming of rooms or body ..... 02 Repairing equipment or electrical wiring .... 03 Lighting ..... 04 Refueling/checking fuel ..... 05 Alcohol production ..... 06 Burning of waste/bonfire ..... 07 Smoking ..... 08 Bathing/ washing ..... 09 Rescuing another person with burn injury... 10 Motor vehicle accident ..... 11 Building fire ..... 12 Other (specify) ..... 96 Don't know ..... 98 Refused ..... 99	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">           } } </div> <div>           212 212 → 213     214    224         </div> </div>

<b>212</b> Stove height	At what height was the fire or base of stove located? <i>Use 0.9m stick to help judge height</i>	At ground level ..... 01 Less than 0.9m from the ground..... 02 At least 0.9m from the ground ..... 03 Don't know ..... 98	} 214
<b>213</b> Repair object	What was being repaired?	(Specify) ..... Don't know ..... 98 Refused ..... 99	
<b>214</b> Accidental movement	Was an accidental movement involved in causing the burn (e.g. fall, spill, clothing or hair catching fire, getting too close to fire or hot object)?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	
<b>215</b> Equipment problem	Did an equipment problem contribute to the burn (e.g. gas leak, kerosene stove explosion, uncontrolled flames)?	Yes ..... 01 (Specify) ..... No ..... 02 Don't know ..... 98 Refused ..... 99	
<b>216</b> Unsafe activity	Was a person doing something unsafe/risky when the burn happened (e.g. electrical repairs, mishandling a pressure cooker, refueling stove while stove alight, and mixing water in hot oil to check hotness of oil)?	Yes ..... 01 (Specify) ..... No ..... 02 Don't know ..... 98 Refused ..... 99	
<b>217</b> Ignition of clothing	Did the person's clothing catch fire?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	
<b>218</b> Medical pre-disposition	Did a medical reason contribute to the burn injury happening?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	} 220
<b>219</b> Medical reason	What was the medical reason that contributed to the burn injury happening?	Prescription drugs influencing coordination or reaction time..... 01 Alcohol taken within 6 hours of injury ..... 02 Illegal drugs taken within 6 hours of injury.... 03 Epilepsy..... 04 Psychiatric or psychological disorder ..... 05 Physical disability ..... 06 Dementia or mental disability ..... 07 Other (specify)..... 96 Don't know ..... 98 Refused ..... 99	

<b>220</b> Location in home	<b>Only for the burn injuries that happened in the home (refer to Q206)</b> If the burn happened at home, in which part of the house did the burn injury occur?	Kitchen ..... 01 Living rooms/sleeping places ..... 02 Yard (or area outside house)..... 03 Corridor ..... 04 Bathroom (bathing/washing places) ..... 05 Not applicable..... 08 Other (specify)..... 96 Don't know ..... 98 Refused caused by rubbing against a rough surface 99	
<b>221</b> Workplace activity	<b>Only for the burn injuries that happened in a workplace (refer to Q207). Includes cottage industries in the home.</b> If the burn injury happened at a workplace while undertaking paid work, what was the main type of activity at the workplace?	Food preparation ..... 01 Petrochemical ..... 02 Textiles ..... 03 Construction ..... 04 Agricultural /farm ..... 05 Fireworks / related ..... 06 Electricity supply company ..... 07 General industry ..... 08 Not applicable..... 09 Other (specify)..... 96 Don't know ..... 98 Refused ..... 99	
<b>222</b> Primary cause of burn	What was the main cause of the burn?	Flames / fire ..... 01 Hot liquid, steam or other gas..... 02 Contact with a hot object or solid substance (e.g. cookstove, pot, engine) ..... 03 Inhalation of smoke ..... 04 Electrical burn..... 05 Flash burn (intense heat or light)..... 06 Friction burn ..... 07 Chemical burn ..... 08  Other (specify)..... 96 Don't know ..... 98 Refused ..... 99	<a href="#">223</a>  224  222_a  224
<b>222_a</b>	If the burn was caused by chemical, where was chemical stored?	Specify ..... Don't know ..... 98	224

<b>223</b> Fuel source-flame burn	If the burn was caused by flames /fire, what was the source of fuel?	Wood, dung, leaves, rubbish, straw, thatch ..... 01 Coal, charcoal, briquette ..... 02 Kerosene ..... 03 LPG ..... 04 Biogas ..... 05 Diesel/petrol ..... 06 Candle ..... 07 Cigarettes /matches ..... 08 Lightning ..... 09 Other (specify) ..... 96 Don't know ..... 98 Refused ..... 99	
<b>B3. INJURY TREATMENT</b>			
<b>224</b> First aid at scene (WHO 1.15.1)	Did anyone try to help the injured person by giving first aid?	Yes ..... 01 No ..... 02 Don't know/Can't remember ..... 98 Refused ..... 99	226
<b>225</b> Person who provided first aid (WHO 1.15.2)	Who gave first aid to the injured person?  <b>Multiple answers possible.</b>	Bystander ..... 01 Friend/family ..... 02 Teacher ..... 03 Police ..... 04 Ambulance personnel/paramedics ..... 05 Doctor ..... 06 Nurse ..... 07 Fire brigade personnel ..... 08 Other (Specify) ..... 96 Don't know ..... 98 Refused ..... 99	
<b>226</b> Seeking medical care (WHO 1.4.1)	After he/she was injured, was medical attention/treatment sought outside of the household (e.g. at a health facility, hospital, clinic)?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	232

<b>227</b> <b>Transport to health facility</b> (Adapted from WHO 1.15.3)	How did the injured person get to the health facility for treatment of <u>their</u> injuries?	By foot ..... 01 By private car ..... 02 By taxi ..... 03 By public transport..... 04 By ambulance..... 05 By bicycle ..... 06 By animal cart ..... 07 By helicopter/aeroplane..... 08 By stretcher/doko (basket)..... 09 Other (specify)..... 96 Don't know ..... 98 Refused ..... 99	
<b>228</b> <b>Transport time</b> (WHO 1.15.4)	How long did it take for the injured person to get to the health facility from the time of injury?	Less than 1 hour..... 01 1–2 hours ..... 02 3–6 hours ..... 03 7–9 hours ..... 04 10–12 hours ..... 05 13–24 hours ..... 06 More than 24 hours ..... 07 Don't know ..... 98 Refused ..... 99	
<b>229</b> <b>Place of medical care</b> (Adapted from WHO 1.4.2)	Where did the injured person first go for medical treatment for <u>their</u> injury?	<u><b>Govt. Service</b></u> Govt. Hospital..... 01 PHC clinic..... 02 Health post ..... 03 Sub Health Post ..... 04 PHC outreach..... 05 Mobile clinic..... 06 <u><b>Non-Govt. Service</b></u> Ayurvedic centre..... 07 ADRA ..... 08 Nepal Red Cross ..... 09 UMN ..... 10 Other NGOs ..... 11 <u><b>Private medical sector</b></u> Private hospital/clinic/nursing home ..... 12 Pharmacy ..... 13 Traditional health centre..... 14 Other (specify)..... 96 Don't know ..... 98 Refused..... 99	

<b>230</b> Admission to hospital/health facility (WHO 1.4.3)	Was the injured person admitted to a hospital ward or health facility for treatment of <u>their</u> injury?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	232
<b>231</b> Length of hospital stay (WHO 1.4.4)	How many days did the injured person stay in the hospital for treatment of <u>their</u> injury?	<div> <input type="text"/> <input type="text"/> months and <input type="text"/> <input type="text"/> days         </div> Don't know ..... 98	
<b>B4. BURN INJURY TREATMENT (If Check 2 = 06 (Burn) proceed with Q232, or else go to Q237)</b>			
<b>232</b>	Was cool, running water applied to the burned area for first aid?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	234
<b>233</b>	If cool, running water was applied to the burned area, for how long was this carried out (minutes)?	<div> <input type="text"/> <input type="text"/> <input type="text"/> minutes         </div> Don't know ..... 98	
<b>234</b>	Was another home-based treatment used as first-aid?	Yes ..... 01 (Specify) ..... No ..... 02 Don't know ..... 98 Refused ..... 99	
<b>235</b>	<b>Refer to Q229 if any sort of care was sought</b> Did a relative or friend accompany the person with the burn injury to the health facility?	Yes ..... 01 No ..... 02 Not applicable ..... 08 Don't know ..... 98 Refused ..... 99	
<b>236</b>	<b>Refer to Q230 if the injured person was admitted to the hospital</b> If the person with the burn injury was admitted to a hospital or health facility did they have any operations?	Yes ..... 01 No ..... 02 Not applicable ..... 08 Don't know ..... 98 Refused ..... 99	

B5. IMPACT OF INJURY – IMPAIRMENT AND DISABILITY			
<b>237</b> Effect on usual activities (WHO 1.5.1)	As a result of the injury, did the injured person suffer any impairment that prevented <u>them</u> from performing his/her usual activities (e.g. going to work or school, doing housework, playing, <u>feeding</u> ) for one or more days?	Yes..... 01 No ..... 02 Don't know ..... 98 Refused..... 99	
<b>238</b> Return to normal activity (WHO 1.5.2)	Since the injury occurred, has/have the injured person/you been able to return to his/her normal activities?	Yes, fully ..... 01 → Yes, but only partially ..... 02 → No ..... 03 Don't know ..... 98 Refused..... 99	238a 238b
<b>238a</b>	If yes,fully, then after how long?	<input type="text"/> <input type="text"/> months & <input type="text"/> <input type="text"/> days	
<b>238b</b>	If yes,but only partially, then after how long?	<input type="text"/> <input type="text"/> months & <input type="text"/> <input type="text"/> days	
<b>239</b> Physical disability (WHO 1.3.1)	<b><i>If the injury happened more than 6 months ago</i></b> Did the injured person suffer a physical disability as a result of being injured?	Yes..... 01 No ..... 02 Injury happened less than 6 months ago..... 08 Don't know ..... 98 Refused..... 99	241
<b>240</b> Nature of disability (Adapted from WHO 1.3.2)	In what ways was the injured person physically disabled?  <b><i>Multiple answers possible.</i></b>	Unable to use hand or arm..... 01 Difficulty using hand or arm..... 02 Unable to use legs ..... 03 Difficulty to use legs/Walk with a limp ..... 04 Loss of hearing..... 05 Loss of vision ..... 06 Weakness or shortness of breath..... 07 Inability to remember things ..... 08 Inability to chew food..... 09 Other (specify) ..... 96 Don't know ..... 98 Refused..... 99	
B6. ECONOMIC IMPACT OF INJURY			
<b>241</b> Loss of employment (WHO 1.5.3)	Did the injured person lose his/her job as a result of being injured?	Yes..... 01 No ..... 02 Not working at time of injury..... 08 Don't know ..... 98 Refused..... 99	
<b>242</b> Loss of job - household member) (Adapted from WHO 1.16.3)	Did anyone in the household lose days of work or school to take care of the injured person?	Yes..... 01 → No ..... 02 Don't know ..... 98 Refused..... 99	242a



<b>242a</b>	If yes, then specify	<input type="text"/> <input type="text"/> months & <input type="text"/> <input type="text"/> days	
<b>243</b> Decline of household income (WHO 1.16.1)	Did the usual household income (money coming in, not expenditures) decline as a result of the injury event?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	
<b>244</b> Decline in food consumption (WHO 1.16.2)	Did the usual household food consumption decline as a result of the injury event?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	
<b>245</b> Loans to pay for medical treatment (WHO 1.16.4)	Did the household have to borrow money to take care of the injured person <u>or make up for loss of income?</u>	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	
<b>246</b>	Did the household have to depend on charity to take care of the injured person <u>or make up for loss of income?</u>	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	
<b>247</b> Selling possessions (WHO 1.16.5)	Did the household have to sell anything to pay for medical treatment for the injured person or make up for loss of income?	Yes ..... 01 No ..... 02 Don't know ..... 98 Refused ..... 99	

*Thank you very much for your valuable time and information.*