



Incidence and the causes of unintentional non-fatal injuries at a commune in the Central Highlands - Vietnam, 2013

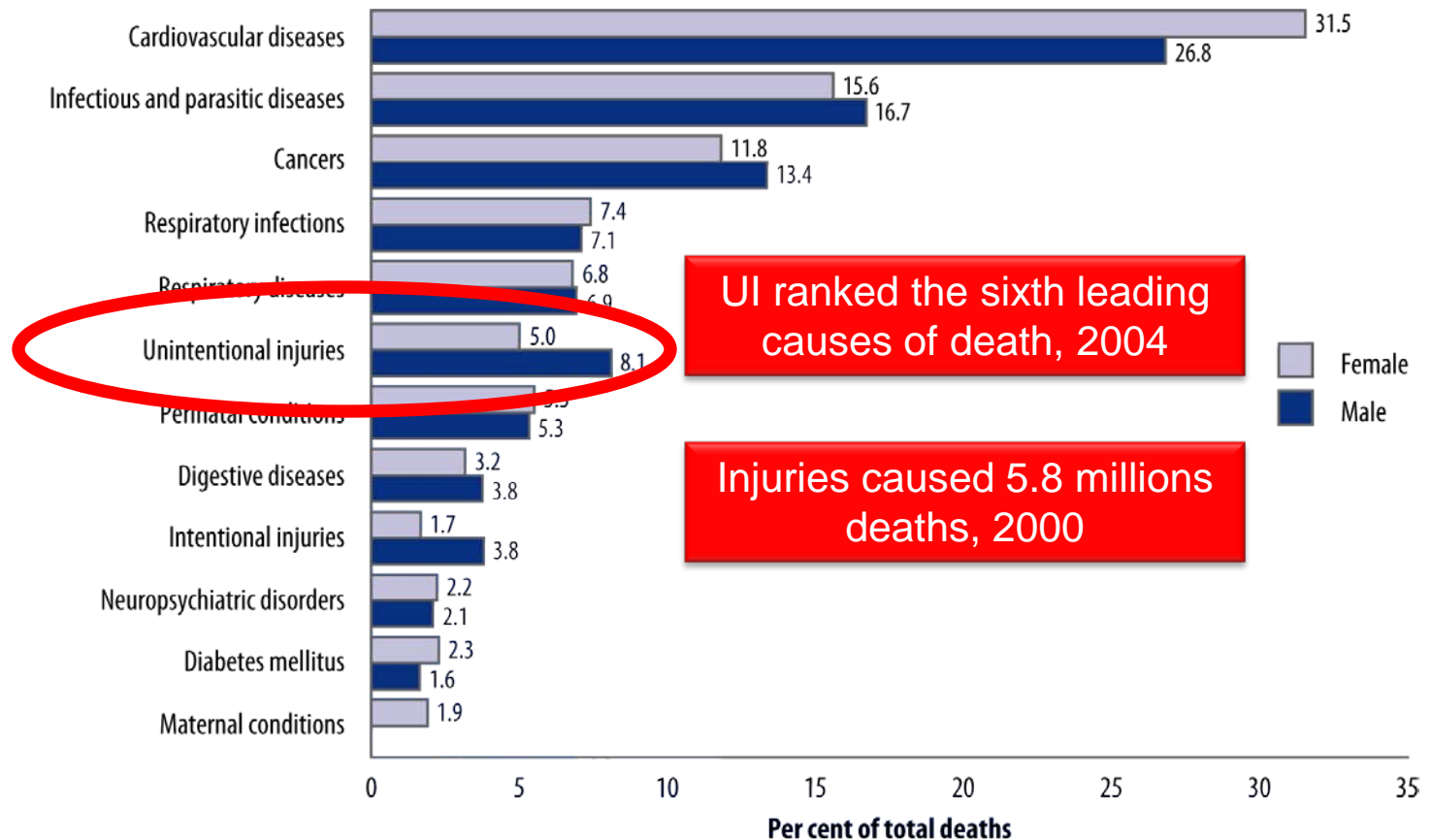
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Global distribution of deaths by leading cause groups, by gender, 2004



Source: The Global Burden of Diseases, WHO, 2004

Non-fatal injury rate per 100,000 by causes and regions (VNIS 2010)

Injury causes	Red River Delta	Northern Midlands and Mountains	North Central Coast	Central Highlands	South Central Coast	Mekong River Delta	All
Traffic accident	845.0	1205.2	1020.6	901.0	1156.4	798.7	1010.4
Fall	372.0	794.6	479.7	255.4	525.0	424.7	519.7
Sharp objects	188.7	356.5	155.3	55.7	78.9	284.1	212.7
Animal bite	68.8	96.2	132.0	60.2	99.9	242.5	128.4
Obtuse/ falling objects	73.5	78.8	80.7	26.9	40.3	82.7	69.9
Fighting	28.3	51.3	86.0	43.3	51.7	64.5	58.2
Burn	38.6	121.4	18.6	11.3	73.0	21.1	53.5
Electric shock	13.5	2.1	8.0	0.0	32.3	19.3	13.1

Total	1635.5	2717.2	1998.4	1364.4	2138.9	1962.3	2092.0

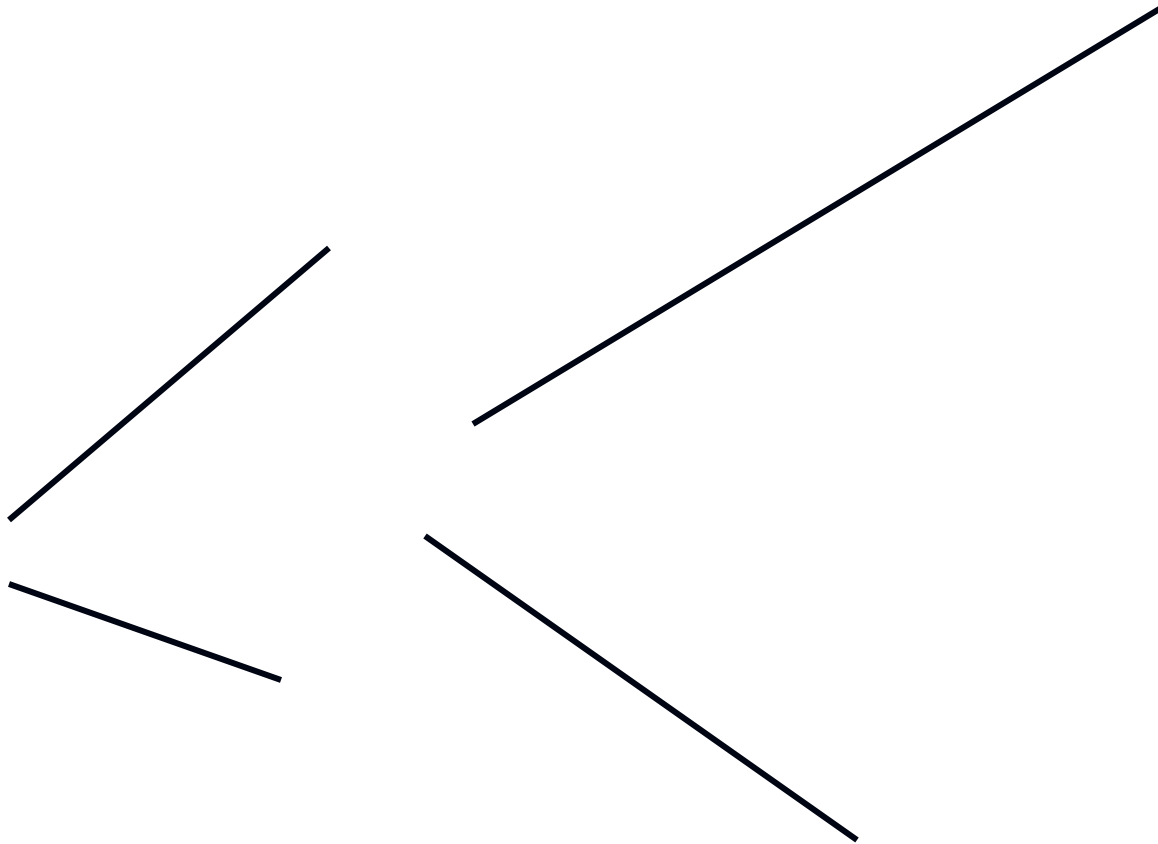
Objectives of the study

- **To describe the incidence of non-fatal unintentional injury in the defined community**
- **To identify the causes and possible related factors of the injuries**
- **To identify the pattern of seeking medication of the injured people**
- **To evaluate the impact of injury on the economic status of the injured people**

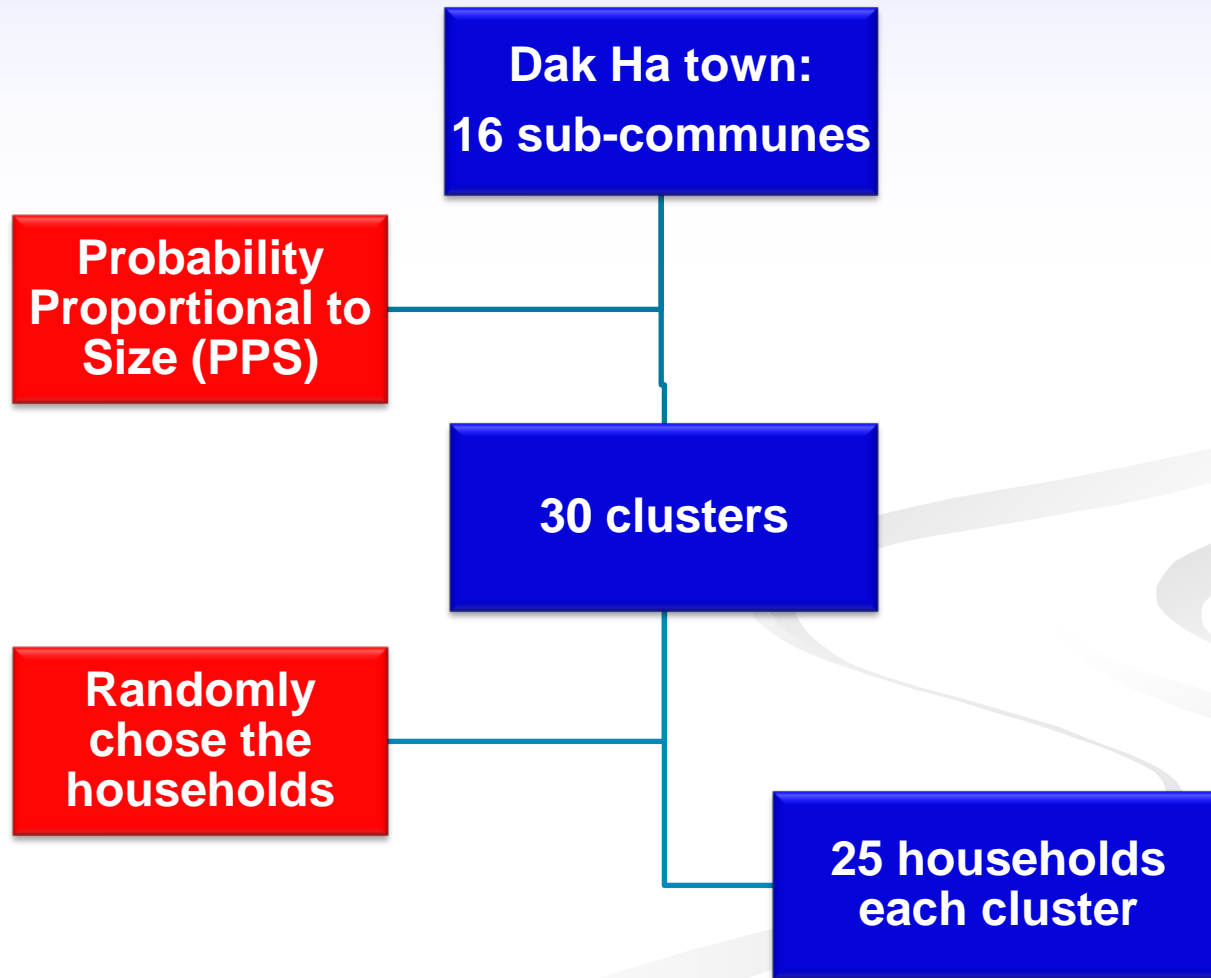
Methods

- **Study design:** cross-sectional design
- **Study subject:** people with unintentional non-fatal injuries
- **Sample size:** $n = [4 (r) (1-r) (f) (1.05)] / [(e^2) (p) (n_h)]$
 - $n = 747$ households
 - 750 households = 30 clusters x 25 households

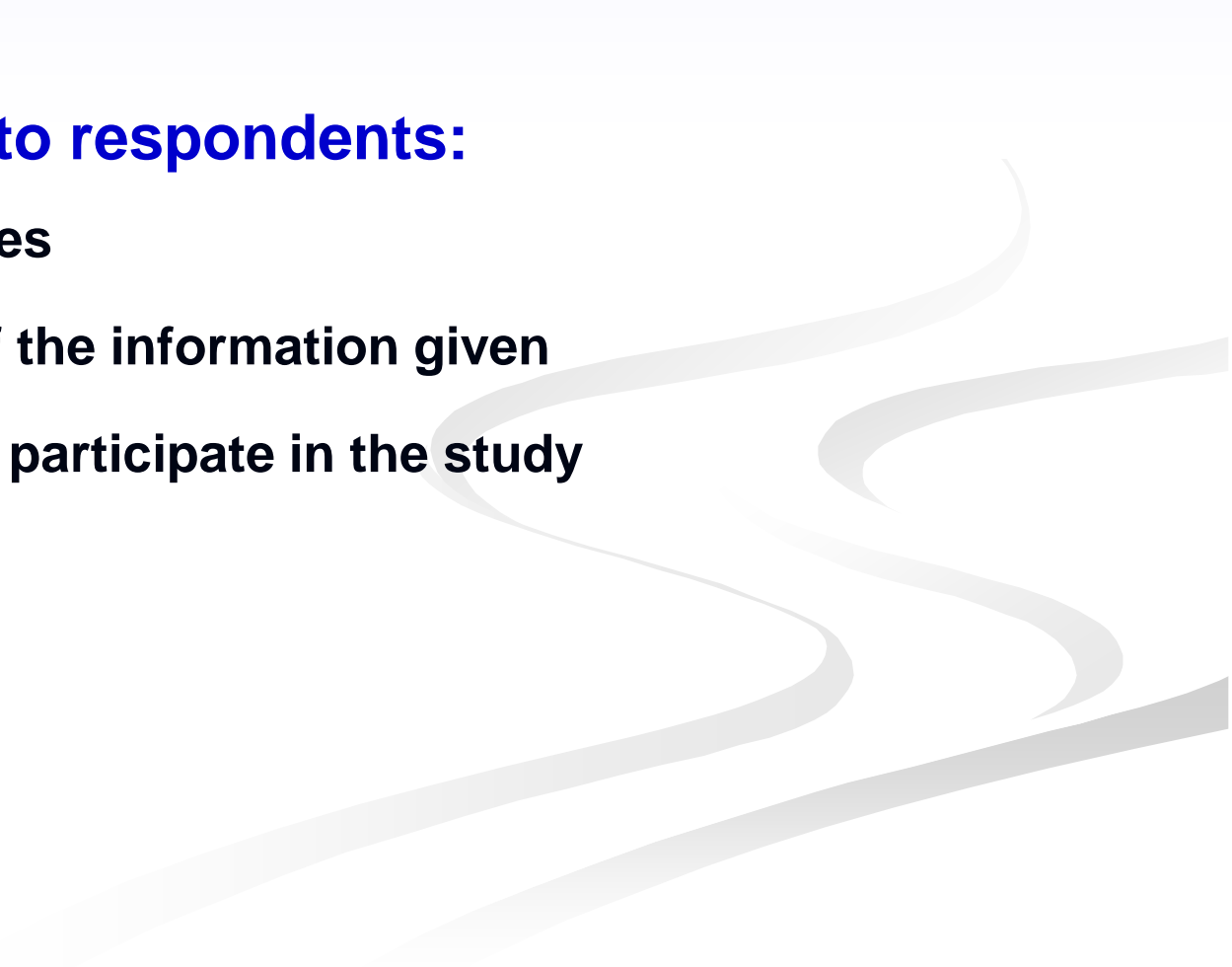
Study settings



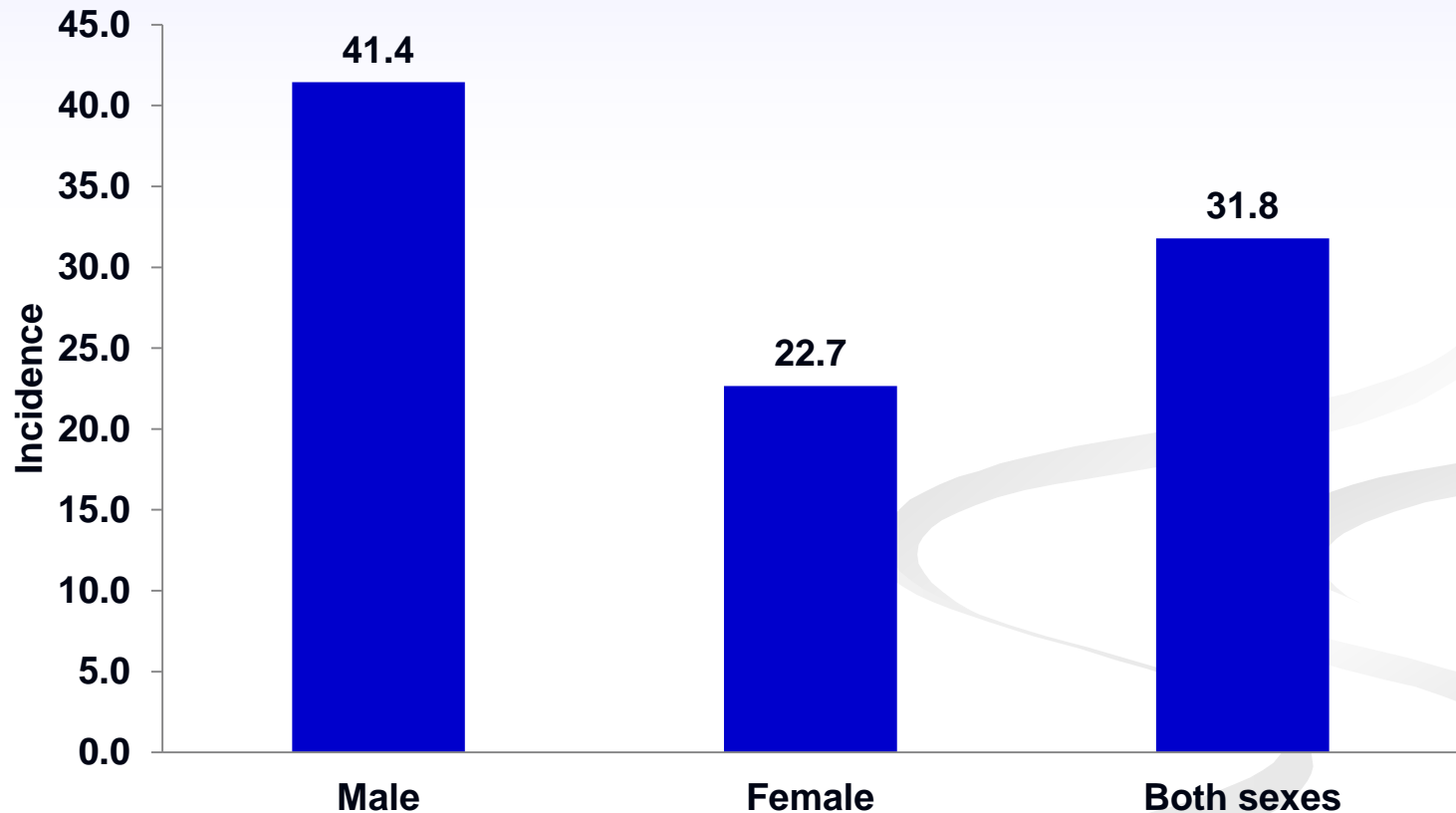
Sampling frame and method



Ethical consideration

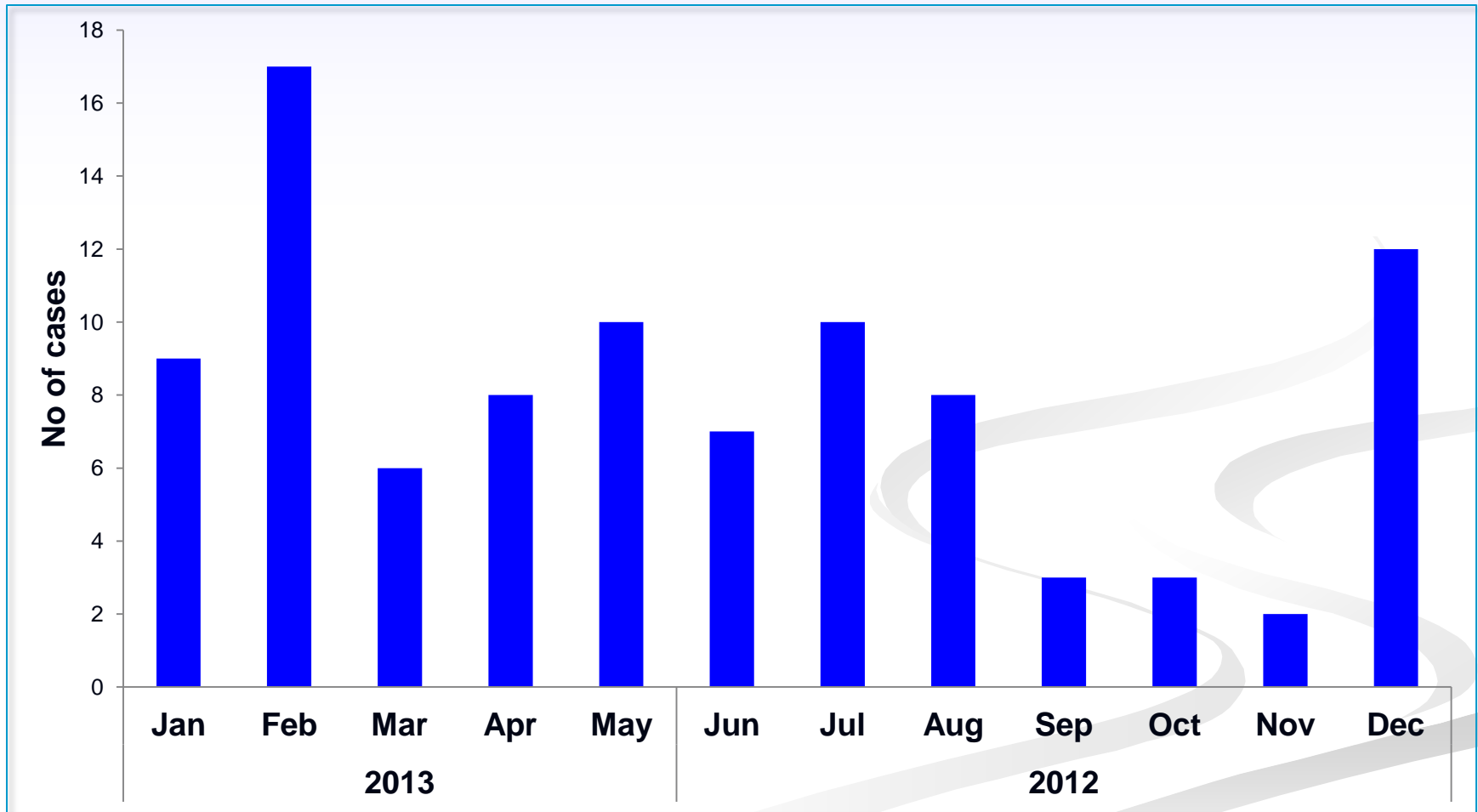
- **Ethical clearance letter**
 - **Verbal consent to respondents:**
 - **Study objectives**
 - **Confidential of the information given**
 - **Acceptance to participate in the study**
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Incidence per 1,000 person-years by gender, Dak Ha town, 2013

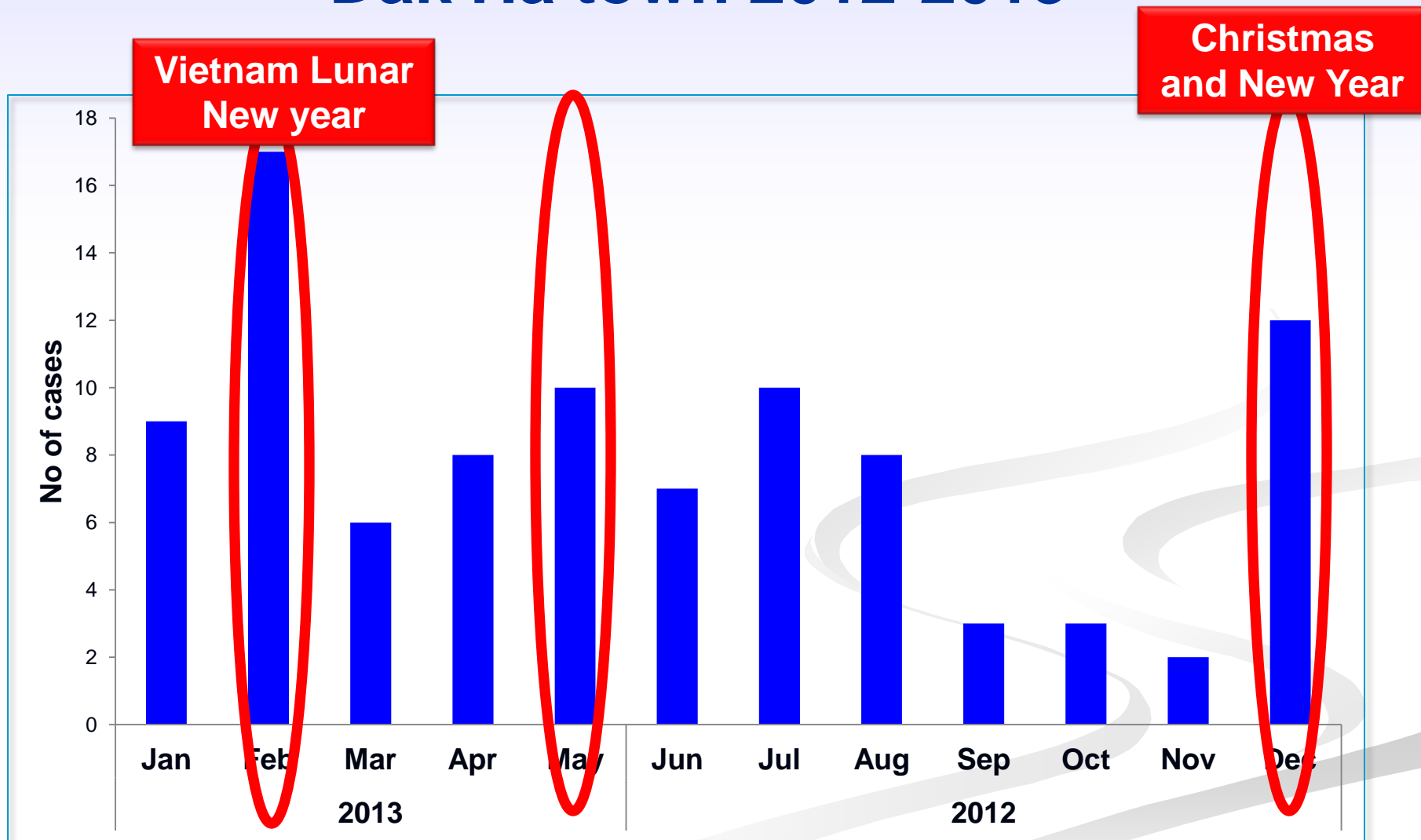


- Response rate: 748/750 households = 99.7%
- n = 2989 individuals

Distribution of injured cases by month in Dak Ha town 2012-2013

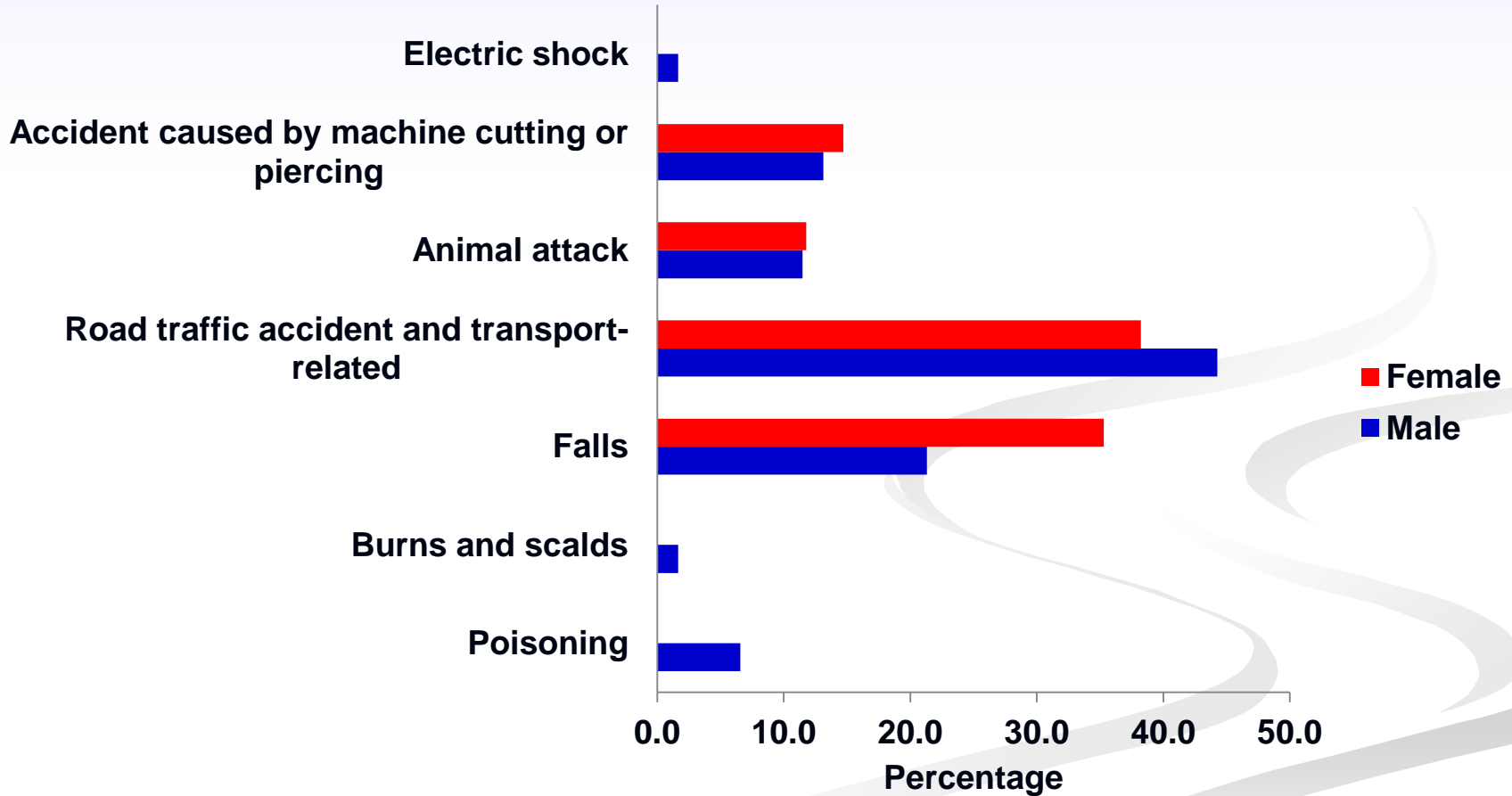


Distribution of injured cases by month in Dak Ha town 2012-2013



Southern Independent Day and Labor Day Festival

Percentage of injury by cause and gender, Dak Ha town 2013

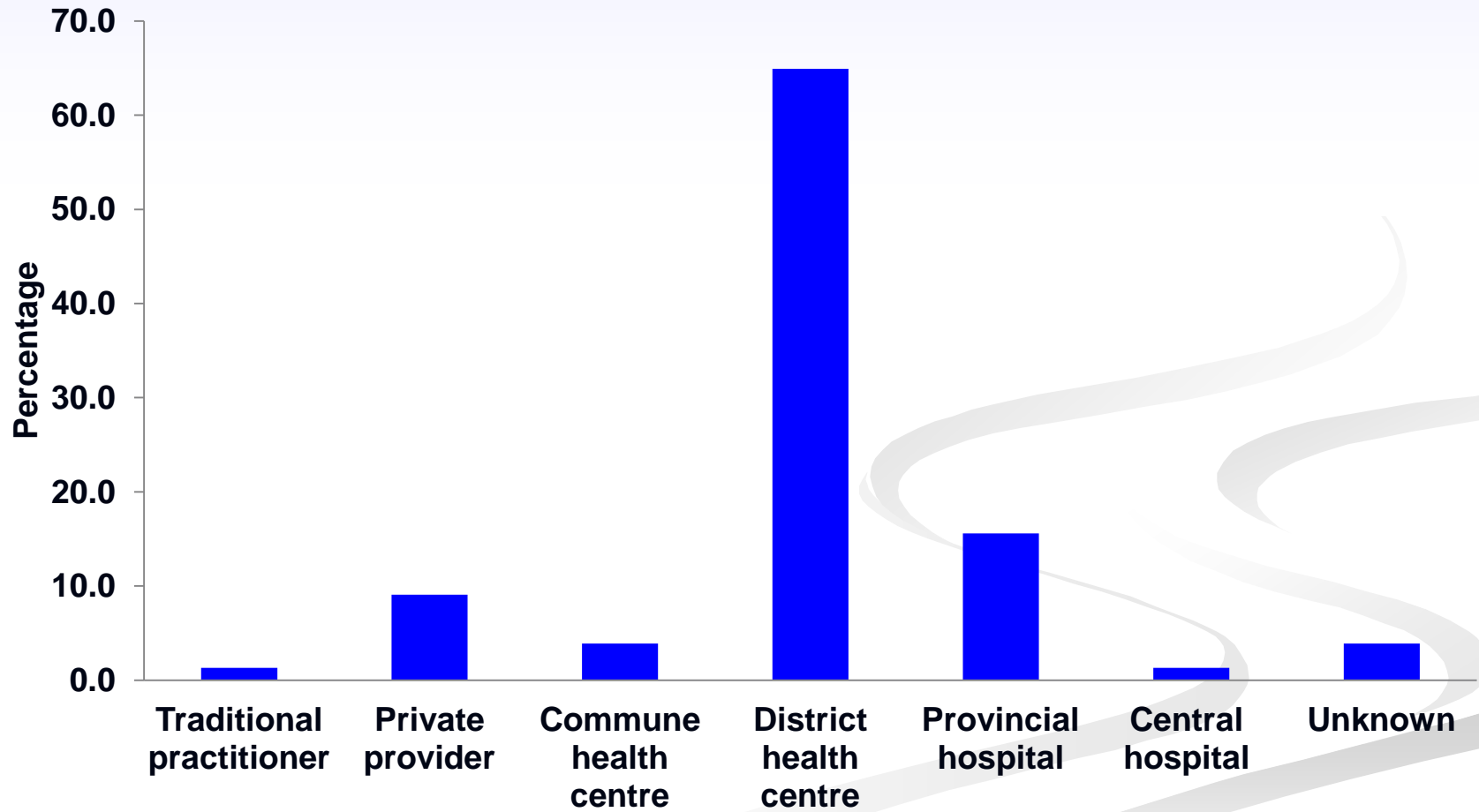


Risk factors

Factor	p - value
Gender	0.004
Age-group	0.182(*)
Education	0.009
Occupation	0.001
Ethnic	0.002
Family annual income	0.037

*** Not statistics significant**

First place of treatment



Economic cost

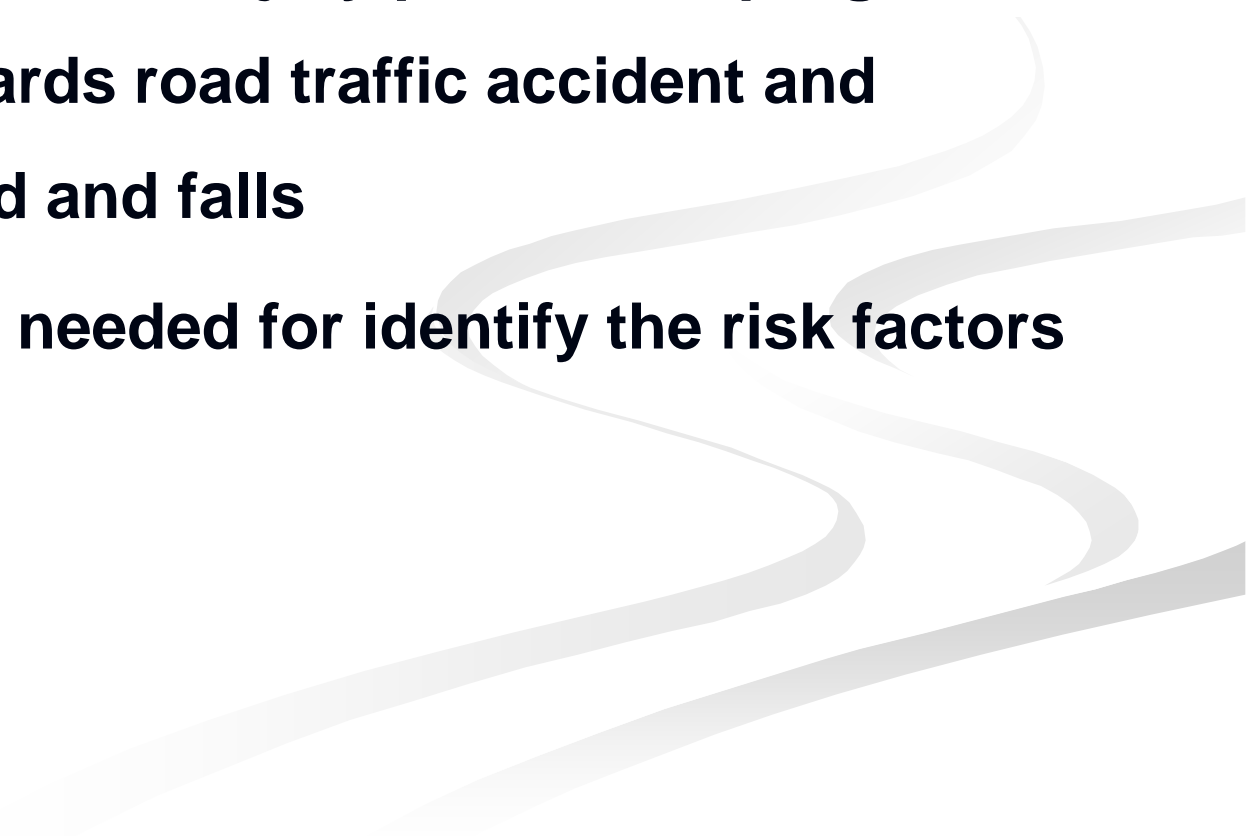
	n	Total	Average
Out of work/school (days)	95	2896	63
Treatment at government health facilities (days)	44	675	15
Caregivers (days)	68	995	15
Expenses for medical treatment (VND)	95	436,108,000	5,012,736

Expenses for indirect cost???

Conclusions

- **Incidence rate: male > female**
- **Leading causes: road traffic accident and transport-related and falls**
- **Risk factors: gender, education, occupation, ethnic, family annual income**
- **Economic burdens: injured people + the caregivers**

Significance of findings

- **First community-based survey in the region**
 - **Vietnam unintentional injury prevention program should aim towards road traffic accident and transport-related and falls**
 - **Further study is needed for identify the risk factors**
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**Thank you for your
attention!**

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