



Road
Traffic
Injuries
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Questions to answer by researching pedestrian injuries



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Rationality

- There are hundreds of scientific research works and manuscripts on pedestrian injuries, however, there are still many unanswered questions about pedestrian injuries need to be investigated at global level.
- In any community we also need scientific evidence to have a clear picture of the problem, associated risk factors, and the best interventions and implementations.
- Many risk factors associated with pedestrian injuries are known. However, these factors vary community to community.

3 Main Questions

- What is the problem?
- What are the causes?
- What works?

Some known factors associated with pedestrian injuries

- Factors related to the person
- Stage of development, behavior, and cognition
- Short attention span
- Irregular walking speed
- Propensity for midblock dart-outs
- Anatomic development and physical attributes
- Relatively short stature (more difficult to see and be seen)
- Use of reflective clothes
- Sudden appearance in the roadway
- Social environment
- Effect of others on crossing behavior
- Crossing guards
- Parent or other accompanying adult
- Older sibling or peer

Some known factors associated with pedestrian injuries

- Crowding
- Factors related to the driver
- Use of alcohol
- Driver fatigue
- Factors related to the environment
- Type of road
- Driveway, parking lot, freeway
- Layout of road
- Traffic signals and traffic islands
- Traffic density and vehicle speed
- Home and neighborhood characteristics
- Roadside parking
- Vehicle design
- Inclement weather
- Darkness
- Etc.

Questions on an epidemiological basis:

- What is the magnitude of the problem of pedestrian injuries?
- What are the risk factors associated with pedestrian injuries?
- Who is at risk for pedestrian injury and death?
- When do pedestrian deaths and injuries happen?
- How often is alcohol involved in a pedestrian injury or death?
- Is cell phone use associated with pedestrian injuries?
- What can be done to improve safety for pedestrians? And What interventions can be implemented?
- How can pedestrian deaths and injuries be prevented?
- How the interventions on pedestrian injury prevention should be evaluated?

What is the magnitude of the problem of pedestrian injuries?

- Incidence rates
- Prevalence rates
- Cost
- Burden
- Mortality rates
- Fatality rates
- Etc.

What is the magnitude of the problem of pedestrian injuries in your community?

What the risk factors associated with pedestrian injuries?

Risk factors influencing:

- Exposure to Risk
- Severity of injuries
- Individuals
- Environment
- Role of laws and legislations
- Lack of Knowledge and negative attitude
- Inadequate adults' supervision (for children)

What are the risk factors associated with pedestrian injuries?

Who is at risk for pedestrian injury and death?

- More than two-thirds of pedestrians who die are males.
- About one-fifth of children between the ages 5 and 9 who died in traffic crashes are pedestrians.
- Children ages 15 and younger account for 22 percent of all pedestrians injured in traffic crashes.
- Older pedestrians (over age 65) account for 18 percent of all pedestrian fatalities and 10 percent of all pedestrian injuries.
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Who is at risk of pedestrian injury and death in your community?

When do pedestrian deaths and injuries happen?

- Thirty-eight percent of all young (under age 16) pedestrian fatalities occur between 3 and 7 p.m.
- Pedestrian deaths are more likely to occur Fridays, Saturdays or Sundays than on other days; nearly half of all pedestrian fatalities occurred on these days.
- More pedestrians die on New Year's Day than on any other day of the year.
- Halloween is the most dangerous day of the year for pedestrian injuries and deaths among children.
- Children are walking at night and in costumes, which may impede their vision and create tripping hazards.

When do pedestrian deaths and injuries happen in your community?

How often is alcohol involved in a pedestrian injury or death?

- Alcohol involvement, either by a driver or pedestrian, has been reported in nearly half of traffic crashes that resulted in pedestrian fatalities.
- A study in the US showed that thirty-six percent of pedestrians killed in traffic accidents had blood alcohol concentrations of .08 or higher. Thirteen percent of drivers had .08 blood alcohol concentrations. In 6 percent of accidents, both the driver and pedestrian were intoxicated.

How often is alcohol involved in a pedestrian injury or death in your community?

Is cell phone use associated with pedestrian injuries?

- Use of cell phone is a growing trend in the world.
- In the US, the rate of pedestrian injuries resulting from walking while using a cell phone, either to talk or to text, doubled from 2006 to 2007 and doubled again in 2008.

Is cell phone use associated with pedestrian injuries in your community?

Other questions need to be answered in your community?

- Is it easy to cross streets?
- Do drivers behave well?
- Do you have enough pedestrian routes to walk safely?
- Is it easy to follow safety rules for the pedestrians?
- Is your walk pleasant in your streets?
- Do pedestrians behave safe in your community?
- What are the pedestrians unsafe behaviors?
- What your people rate pedestrian safety in their neighborhoods?
- What are the needs to be changed for the pedestrian safety?

The importance of evidence as a foundation for prevention

- **Why collect reliable data on Pedestrian injuries?**
 - Describe the burden of road traffic injuries.
 - Assess risk factors.
 - Establish priorities and allocate resources for prevention.
 - Develop and evaluate interventions.
 - Provide information for policy-makers and decision-makers.
 - Raise awareness.
- **What are the main sources and types of data? (e.g. Police, EMS, Surveillance system, etc.)**
- **How are data on road traffic injuries collected?**

Questions to think about

- The majority of people in a certain community do not cross pedestrian zebra despite the existence of the law. Discuss what you would do to address this problem.
- Discuss the roles of the different sectors involved in pedestrian injury prevention in your country. How well do these sectors collaborate in your country? What areas of collaboration need to be improved?
- Identify and discuss the challenges you on preventing pedestrian injuries face. How can these challenges be addressed?
- What is the national policy on pedestrian safety?
- What are the Possible Explanations for variation rates of pedestrian Injuries?

Conclusion

- A broad and balanced approach combining educational, regulatory, technological, and environmental components is essential to prevent Pedestrian injuries.
- Pedestrian safety is a complex problem need to be solved by researching.
- For instance, For a young child, the act of crossing a street is a conscious, problem solving situation, with each circumstance appearing to be unique.
- Is a child ready and able to acquire the necessary skills through education or training, or should these approaches be made secondary to efforts designed to change driver behavior, adult supervision, or the roadway environment? It appears that certain elements can be taught successfully, albeit with great educational effort; the pretend road is a good example of this. The question still remains, should pedestrian safety be a primary focus of injury prevention education?

Several factors should be considered in answering these questions.

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Thank you for your attention

