



Connecting Health & Housing: ELDERLY INJURY

Presented by:

The California-Nevada
Public Health Training Center

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Learning Objectives

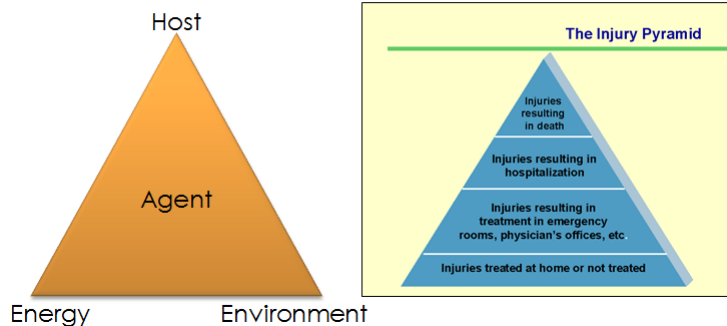
- **After this tutorial you will be able to...**
 1. Identify the magnitude of elderly unintentional injury in the home
 2. Describe the connection between elderly unintentional injury and the home environment
 3. Provide healthy homes recommendations to reduce unintentional injuries

Identify the Problem

- Injury
 - Intentional Injury
 - Injury deliberately inflicted on another person or oneself
 - E.g., homicide, interpersonal violence, suicide
 - Unintentional Injury
 - Injury that occurs without the intention to harm another person or oneself
 - E.g., road traffic injuries, falls, fires, choking, suffocation, drowning

Identify the Problem

Injury Epidemiological Model



Identify the Problem

- Injury is a major public health concern that threatens the health and safety of people of all ages
 - Elderly populations are at higher risk
 - Spend the majority of their time in the home
 - Home-related injuries that affect the elderly population are:
 - Trips and Falls
 - Fires and Burns
 - Carbon Monoxide Poisoning
 - Excessive Heat Exposure
 - Excessive Cold Exposure

Magnitude of the Problem

- Elderly Population(65 years of age and older)
 - Is one of the fastest growing populations in the U.S.
 - By 2050, the elderly population is projected to reach about 86 million individuals (20% of entire U.S. population)
 - Unintentional injuries
 - 5th leading cause of death among the elderly
 - Home
 - 2nd most common location for unintentional deaths
 - The elderly have challenges at home: due to hearing, vision, and sense of smell problems, as well as physical disabilities

Magnitude of the Problem

- Trips and Falls
 - Highest ranked unintentional injury affecting the elderly population in the U.S.
 - 1/3 of elderly individuals fall every year
 - Every year, falls account for:
 - About 54% of all unintentional injury deaths
 - More than 36% of all nonfatal home injuries
 - About 4 million emergency room visits
 - Non-fatal falls have devastating consequences
 - Fractures and head trauma
 - Social withdrawal
 - Loss of independence and confidence
 - Admission to long-term care facilities
 - Depression or anxiety

Magnitude of the Problem

- Fires and Burns
 - Majority of people die from smoke or toxic gases that were by-products of household fires
 - Elderly at high risk of death due to fire
 - Smoke detectors
 - Elderly have difficulty hearing high frequency alarms (especially when sleeping or in a room without a smoke detector)
 - Major risk factor for household deaths and injuries:
 - Nonfunctioning or absent smoke detector in the home
 - In the U.S., a total of 90% of homes have a smoke detector, but only 1/3 of these homes have a functioning smoke detector

Magnitude of the Problem

- Carbon Monoxide (CO) Poisoning
 - Odorless gas produced by stoves, gas ranges, heating systems, etc. when they combust fuel
 - CO detectors
 - Elderly have difficulty hearing high frequency alarms (especially when sleeping or in a room without a CO detector)

Magnitude of the Problem

- Excessive Heat Exposure
 - Heat cramps
 - Heat exhaustion
 - Heatstroke
- Excessive Cold Exposure
 - Central nervous system depression
 - Arrhythmias
 - Renal failure
- Every year, about 40% of deaths due to excessive heat or cold exposures are among the elderly population

Connection to the Home

Unintentional Injury	Problem
Trips and Falls	<ul style="list-style-type: none"> -Missing hand rails -Missing anti-slip mats in the bathtub or shower -Lack of proper lighting -Clutter
Fires and Burns	<ul style="list-style-type: none"> -Lack of smoke detectors -Lack of fire extinguisher
Carbon Monoxide Poisoning	<ul style="list-style-type: none"> -Lack of carbon monoxide detectors -Gas appliances not properly vented
Excessive Heat and Cold Exposures	<ul style="list-style-type: none"> -Damaged central heating and ventilation system -Cracked or broken windows -Cracks or holes in walls or ceiling

Healthy Homes Recommendations

Unintentional Injury	What can be done to reduce unintentional injury in the home?
Trips and Falls	<ul style="list-style-type: none"> -Make sure that all stairways have handrails -Install grab bars in bathtubs and showers -Install anti-slip mats in bathtubs and showers -Install night lights in bedrooms, hallways, and bathrooms -Keep your home clutter free
Fires and Burns	<ul style="list-style-type: none"> -Install at least one smoke detector on every level in house (ideally, in every room and hallway) -Test the smoke detector batteries monthly -Obtain a fire extinguisher and place it in a location where it is easily accessible in the case of an emergency

Healthy Homes Recommendations

Unintentional Injury	What can be done to reduce unintentional injury in the home?
Carbon Monoxide Poisoning	<ul style="list-style-type: none"> -Install at least one carbon monoxide detector on every level in house (preferably in every sleeping room and hallway) -Test the carbon monoxide detector batteries monthly -Properly vent gas-burning appliances (i.e., to the outside of the home)
Excessive Heat and Cold Exposures	<ul style="list-style-type: none"> -Seal cracked windows or replace broken windows -Seal cracks and holes in the walls or ceiling of the home -<u>Summer</u> <ul style="list-style-type: none"> -Set thermostat to 80° when home and 83° when away from home -<u>Winter</u> <ul style="list-style-type: none"> -Set thermostat to 68° when home and 55° when away from home

Conclusion

- As public health professionals:
 - You may visit an elderly individual's home and have the opportunity to identify potential environmental hazards that can lead to unintentional injuries in the home
 - You may have the opportunity to provide useful education and assistance regarding ways to avoid or reduce unintentional injuries in the home for the elderly population
- Remember: the elderly population is unique
 - Might need assistance obtaining and installing safety devices