Los Angeles County Injury Hospitalization Report 2008

MANAGING EDITOR
Patti L. Culross, MD, MPH

EDITOR
Isabelle Sternfeld, MSPH

CONTRIBUTIONS
Laura M. Sanger, MA
Nicolle Perras, MPH
James M. DeCarli, MPH, MPA, CHES
Susan Huynh
Alan Zhao
Jose Cabrera

ACKNOWLEDGEMENTS
Our sincere appreciation to the following data providers without whom this report would not be possible:

Hospital Discharge Data provided by the California Office of Statewide Health Planning and Development, http://www.oshpd.ca.gov.


For copies of this report contact:
Injury & Violence Prevention Program
Los Angeles County Department of Public Health
3530 Wilshire Blvd, Suite 800
Los Angeles, CA 90010
(231) 351-7888

SUGGESTED CITATION
Los Angeles County Injury Hospitalization Report 2008

Table of Contents

Executive Summary

Injury Hospitalization Fact Sheets

Introduction

Section 1  Overview
Section 2  Falls
Section 3  Motor Vehicle Traffic Collisions
Section 4  Poisonings
Section 5  Struck By or Against
Section 6  Cutting and Piercing
Section 7  Firearms
Section 8  Natural and Environmental

Appendices

I.  Non-specific Injury Mechanism Categories
II.  Definitions
III.  Technical Notes
IV.  Resources
V.  Map of Service Planning Areas
VI.  Leading Causes of Injury Tables
Executive Summary

Injuries have an enormous impact on Los Angeles County residents — they are the leading cause of death among residents 1-44 year olds. Countywide, between 2000 and 2005 (the latest year for which fatality statistics are available), an average of 4,044 residents died each year from injuries. However, injury fatalities account for only a small portion of all injury occurrences. For every injury-related death, there are many more injury-related hospitalizations and injury-related visits to emergency departments, clinics, and doctor's offices. Statewide, injuries were responsible for 6.8% of the total number of hospitalizations in 2005. In Los Angeles County, they were responsible for 6.1% of total hospitalizations.

It is important to look at patterns of nonfatal injuries since they may be quite different from injury fatalities (which were discussed in a previously released report). For example, firearms caused nearly half of all completed suicides since 2000, but were responsible for less than one percent of all nonfatal suicide attempts. Injury hospitalizations are also important because these severe injuries can have a long lasting impact; in addition to initial treatment, many injuries require long-term rehabilitation or may result in permanent disability.

This report focuses on nonfatal hospitalized injuries in Los Angeles County and covers the years 2000-2006. The report uses data provided by the California Office of Statewide Health Planning and Development (OSHPD) and reviews hospitalization data only. There are no data presented on emergency room visits, primarily because that database goes back only to 2005. Also, there are no data presented on outpatient clinic visits or private practice provider office visits since these health care encounters do not involve hospitalization.

To better explain how injuries affect Los Angeles County residents, this report begins with an overview of injury hospitalizations that discusses what types of injuries are most prevalent and which county residents are most at risk for injury hospitalizations. The next several sections of the report focus on each of the most common causes of injury hospitalizations. Each of these sections compare Los Angeles County statistics with statewide data, show trends over time in hospitalizations, provide information on the populations most affected by that particular type of injury, compare patterns of injury hospitalizations with those of fatal injuries, and discuss prevention strategies for the injury type. Finally, six appendices contain more information including, detailed charts of the top ten causes of injury hospitalization broken down by age, gender, and racial/ethnic group; definitions for terms used in the report; technical notes; and a resource list for more information about injuries.

Overall, there were nearly half a million (468,282) hospitalizations due to injuries in Los Angeles County from 2000-2006, an average of 66,897 per year. Over half of all injury hospitalizations were caused by either falls (41%) or motor vehicle traffic (12%). The majority (84%) of injury hospitalizations were for unintentional injuries (those commonly referred to as accidental). Another 8% were for assaults and 6% were the result of suicide attempts. The remaining hospitalizations were for injuries of undetermined intent and legal intervention injuries. More than one third (35.9%) of all people hospitalized for an injury were over the age of 64. In fact, during the seven year period, there were more injury hospitalizations among 81 year olds than for any other age group.

The purpose of this report is not only to inform, but also to stimulate thought and action. Los Angeles County is home to 10 million people, with diverse populations and subpopulations. This report shows that there are often distinct differences in the causes of injury-related hospitalization and the rates of hospitalization according to age, gender, racial/ethnic group, and geography. For example, while females outnumbered males overall among fall-related hospitalizations, males were more commonly involved in falls that were possibly associated with male-dominated employment such as construction: falls from scaffolding (84% male), falls from buildings (83% male) and falls into holes or openings (67% male). This may suggest the need for increased attention to safety at locations with these types of potential hazards.

Other statistics confirm what we may already suspect in these perilous times for some Los Angeles County residents: Firearm injuries were the 1st leading cause of hospitalization for males 15-19 years old and the 2nd leading cause for males 20-24 years old. More than half (54%) of all patients hospitalized for a firearm injury were between the ages of 15 and 24 years old.

In a another example, 49% of all injury hospitalizations due to excessive heat or cold occurred among residents 65 years and older. This age group represents only 10% of the total population but a disproportionate number of those affected by extremes in weather. Los Angeles County is a broad geographic area that experiences the full range of high and low temperatures. It is important to keep in mind the deleterious health effects cold temperatures, or hot and humid weather can have on the older population of Los Angeles County residents.

This report was prepared to provide detailed information about injury hospitalization risks and prevention strategies that can be used by a wide range of Los Angeles County residents, including community groups, medical professionals, and other individuals and organizations. The report was written by the staff of the Injury and Violence Prevention Program (IVPP), which is part of the Division of Chronic Disease and Injury Prevention within the Los Angeles County Department of Public Health. IVPP’s mission is to reduce and prevent injuries among Los Angeles County residents. IVPP measures and monitors the
occurrence of injuries among population groups, and develops and implements strategies to reduce the morbidity and mortality caused by injuries. For more information about IVPP or to request additional data, please contact us at (213) 351-7888, or visit our website at www.publichealth.lacounty.gov/ivpp

Isabelle Sternfeld, MSPH
Epidemiologist, Injury and Violence Prevention Program

Patti Culross, MD, MPH
Director, Injury and Violence Prevention Program
Total Number of Hospitalizations in Los Angeles County
- An average of 66,897 per year.

Injury Mechanism and Intent
- Over half of all injury-related hospitalizations were from falls (41%) and motor vehicle traffic collisions (12%).
- Unintentional injuries (accidents) accounted for 84% of hospitalizations.
- Nearly three quarters (73.4%) of suicide attempts were caused by poisonings.

Age
- 81 year olds had the highest number of hospitalizations compared to any other age
- Average age of injury-related hospitalization patient was 50.6 years.
- Los Angeles County residents 65 and older have a rate of 2372.2 per 100,000 for unintentional injury-related hospitalizations.
- Unintentional injury-related hospitalizations were three times higher among 65+ residents compared to any other age group.
- Assault and suicide attempt rates were highest among 15-24 year olds.
- Average age of hospitalized assault victim was 31.7 years.
- Average age of hospitalized suicide attempt victim was 35.7 years.
- Average age of hospitalized legal intervention victim was 39.1 years.
- Average age of hospitalized undetermined intent victim was 42.0 years.
- Average age of hospitalized undetermined intent victim was 53.5 years.

Gender
- Males accounted for 53% of all injury-related hospitalizations.
- 86% of assault related injury hospitalizations were among males.
- 59% of suicide hospitalizations were among females.
- 57% of all poisoning hospitalizations were among females.

Race/Ethnicity
- 46% of injury-related hospitalizations were among Whites.
- 34% of injury-related hospitalizations were among Latinos.
- 12% of injury-related hospitalizations were among Blacks.
- 8% of injury-related hospitalizations were among Asians/Others.
- Whites and Blacks were both overrepresented among injury-related hospitalizations compared to the overall county population.
- Among race/ethnicity, Latinos were the youngest with an average hospitalization age of 38.6 years and Whites were the oldest at 60.6 years.
Injury hospitalizations for Whites were highest among fall-related injuries. Blacks and Latinos were overrepresented among firearm-related hospitalizations.

Service Planning Area (SPA)
- Overall injury hospitalization rates were highest in the South SPA (SPA 6) and lowest in the San Gabriel Valley (SPA 3).
- The San Fernando Valley (SPA 2) had the highest number of overall injury hospitalizations while the Antelope Valley (SPA 1) had the fewest.
- The Antelope Valley (SPA 1) had the highest motor vehicle traffic-related injury hospitalizations.
- The West SPA (SPA 5) accounted for the highest (51%) overall percentage of fall-related hospitalizations in the County.
- The South SPA (SPA 6) accounted for 38% of all firearm hospitalizations.

Medical Charges
- Injury-related hospitalization medical charges have dramatically increased almost doubling from $25,540 in 2000 to $47,430 in 2006.
- Suffocation injuries from choking or strangling were the most expensive injuries to treat, averaging more than $85,000 per hospitalization.
- Fire/burn injuries were the second most costly averaging over $60,000 per hospitalization.
- Poisoning, environmental causes and overexertion treatment charges averaged the lowest at under $25,000 per hospitalization.
- Intentional injuries from assaults were higher in medical charges averaging $47,416 per hospitalization, while suicide attempts averaged the least per visit at roughly $21,103.