



Emergency Department Data Surveillance Project Newsletter

The EDDS Project is a joint effort of:



Volume 1, Issue 4

September 2009

Welcome

Welcome to the fourth issue of the Emergency Department Data Surveillance (EDDS) Project Newsletter! The newsletter will provide information on current topics of interest that can be discussed using ED data. A

more detailed description of the data is presented in reports available online at www.SanDiegoCountyEMS.com, www.hasdic.org, or www.sdchip.org. The most recent report available is the 2008 EDDS Aggregate Re-

port. If you want more information, have suggestions, or would like to submit an idea for the newsletter, please contact Holly Shipp at (619) 285-6429 or Holly.Shipp@sdcounty.ca.gov.

Chronic Disease in the Emergency Department

Chronic disease, as defined by the U.S. National Center for Health Statistics, is a disease that lasts for 3 months or longer and cannot be prevented by vaccines or cured by medications. Caused by health-damaging behaviors such as tobacco use, lack of physical activity, and poor nutrition, chronic disease is the leading cause of death and disability in the United States.

Worldwide, four chronic diseases account for fifty percent of all deaths.¹ These include heart disease and stroke, diabetes, respiratory disease, and cancer. In San Diego County, these same four chronic diseases accounted for 57% of deaths in 2007.²

In addition to the high mortality rate, individuals living with chronic disease experience extended pain and suffering, often leading to more frequent encounters with the medical system. During

these encounters, not only can the disease be diagnosed, but risk factors that lead to disease can be identified and discussed with the patient, providing an opportunity for intervention and treatment.

For the purpose of this article, "chronic disease" refers to any of the selected chronic diseases described in the box to the right, which include heart disease and stroke, diabetes, respiratory disease, and cancer. These in particular are worth examining because of their prevalence and highly preventable nature.

When conducting chronic disease emergency department (ED) surveillance, two types of diagnoses are considered: 1) those with a principal diagnosis of a chronic disease and 2) those with any chronic disease diagnosis, or a "mention."

A principal diagnosis of chronic disease refers to the chief cause of the encounter or visit. A mention of chronic disease means that the patient had one or more chronic disease-related diagnoses upon discharge. This mention could have been either the principal diagnosis, a condition that coexisted at the time of en-

Selected Chronic Disease ICD-9-CM Definitions

Heart Disease and

Stroke:

Coronary Heart Disease (CHD) (410-414, 402, 429.2); Stroke (430-438)

Diabetes:

All Types (250)

Respiratory Diseases:

Asthma (493); Chronic Obstructive Pulmonary Disease (COPD) (490-492; 496)

Cancer:

All Types (140-239)

Continued on page 2

Inside this issue:

Welcome	1
Chronic Disease in the Emergency Department	1
Historical Data	3
EDDS Project Description	4
Current Data Reporting Status	4
Upcoming Changes - Language Spoken	4

Prepared by:
County of San Diego,
Health and Human Services
Agency, Public Health Services,
Emergency Medical Services
September 14, 2009

1 World Health Organization

2 "Selected Chronic Disease Deaths - Underlying Cause Only, San Diego County Residents, 2003-2007" County of San Diego, Health and Human Services Agency, Community Health Statistics, 5/28/2009



Chronic Disease in the Emergency Department

Continued from page 1

counter, or a condition that would have affected the treatment received.

During the three year period from 2006-2008, 1,800,766 patients were discharged from a San Diego County emergency department (ED). Of these, 69,072, or 3.8%, had a principal diagnosis of chronic disease, and 267,767, or 14.9%, had a mention of one or more of the selected chronic diseases.

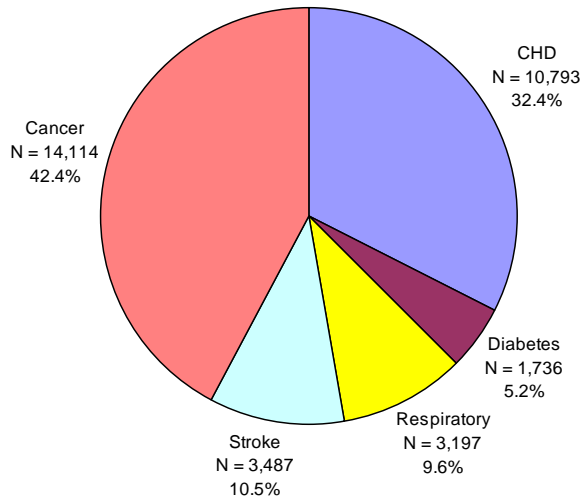
Of all ED discharges with a principal diagnosis of chronic disease, two-thirds were for chronic respiratory diseases (40.6% asthma and 26.6% COPD) and 18.5% were for diabetes. Only 4.9% were for cancer and 3.6% for CHD.

Conversely, deaths due to chronic disease were more

Tobacco use is the single most preventable cause of disease, disability, and death in the United States.

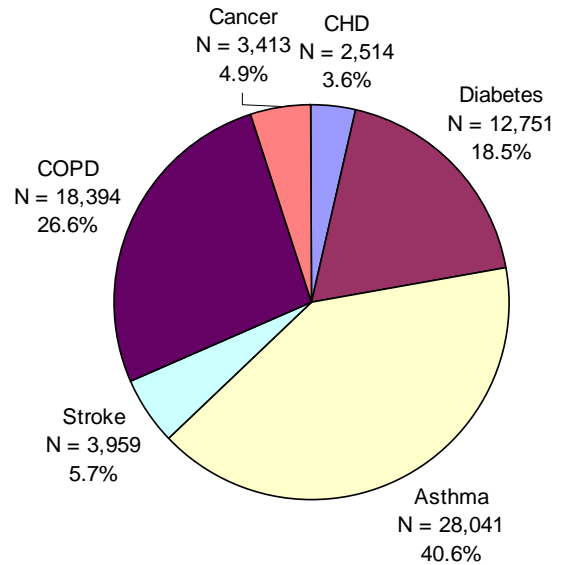
~CDC, 2009

Deaths Due to an Underlying Cause of Selected Chronic Diseases, San Diego County, 2005-2007



Source: Death Statistical Master Files (CA DPH), CoSD HHSA, Community Epidemiology, leading causes of death. Prepared by CoSD HHSA Community Health Statistics Unit, 5/28/2009.

ED Discharges With a Principal Diagnosis of Selected Chronic Diseases, San Diego County, 2006-2008



Source: HASD&IC, CHIP, CoSD HHSA PHS EMS, ED database, 2006-2008

often due to an underlying cause of CHD (32.4%) and cancer (42.4%). Only 9.6% were due to respiratory diseases, which include asthma and COPD, and 5.2% were due to diabetes.

In the San Diego County population, individuals ages 45 years and older accounted for 34.8% of the population from 2006-2008, but 49.5% of all ED discharges for chronic disease. Similarly, black individuals accounted for 5.4% of the population from 2006-2008, but 13.2% of all ED discharges for chronic disease.

In order to compare groups of unequal size to reveal disparities, rates are used. Adults ages 65 years and older had the highest rate of ED discharge for chronic disease. For every 100,000

persons ages 65 years and older in the San Diego County population from 2006-2008, 1,523 were treated and discharged from the ED with a principal diagnosis of chronic disease (1,523.0 per 100,000).

Adults ages 45-64 years had the second highest rate (830.6 per 100,000), followed by children ages 0-14 years (742.8 per 100,000).

Females were discharged for a chronic disease at higher rates than males (775.6 vs. 708.3 per 100,000), and blacks were discharged at higher rates than any other racial/ethnic group (1,825.9 per 100,000).

While chronic diseases are among the most prevalent and costly of all health problems, they are also among the most preventable.

Chronic Disease in the Emergency Department

Continued from page 3

The ED is an important entry point to the system for patients who already have a chronic disease or who have the risk factors that may lead to chronic disease. Even if a patient presents with an illness or injury not related to chronic disease, the ED provides an opportunity for evaluation, identification, education and referral to an appropriate prevention or treatment program, such as smoking cessation or weight management.

Physicians and other ED staff can initiate interventions and promote healthy behaviors to reduce the risk of future negative consequences. For this reason, among others, ED discharge data are important for conducting surveillance of chronic disease in San Diego County.

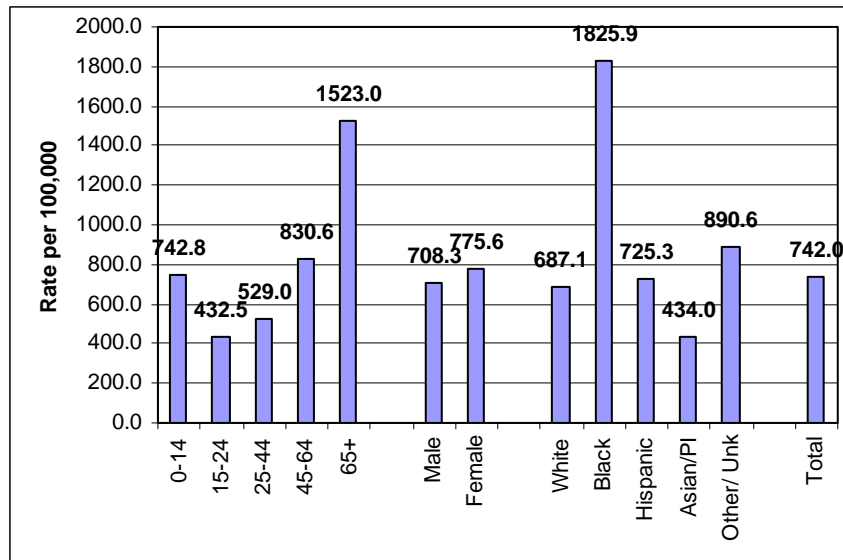
The County of San Diego, Public Health Services is in

the midst of forming a Chronic Disease Prevention Agenda to prevent and reduce the prevalence of chronic diseases among San Diego County residents. The agenda includes the use of environmental strategies, best and promising practices, and a health strategy agenda.

For questions regarding the Chronic Disease Agenda, contact Mona Thabit at (619) 692-8425. For questions regarding the surveillance of chronic disease in San Diego County EDs, please contact Holly Shipp at (619) 285-6429 or Holly.Shipp@sdcounty.ca.gov.



Rate of ED Discharge With a Principal Diagnosis of Selected Chronic Diseases, San Diego County, 2006-2008



Source: HASD&IC, CHIP, CoSD HHSA PHS EMS, ED database, 2006-2008

Historical Data

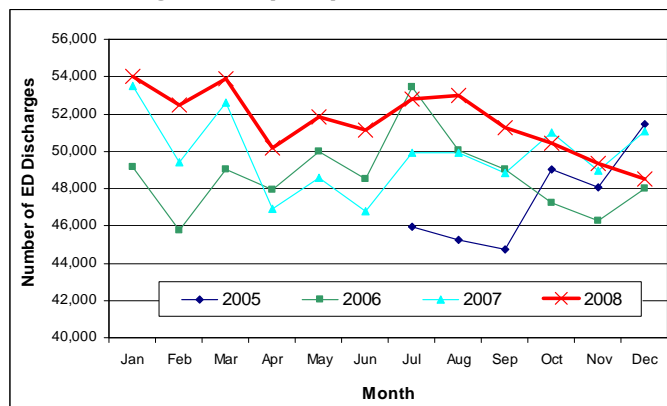
Currently, three and a half years of ED discharge data are available for a total of 2,085,246 records.

Total Number of ED Discharges

July – Dec 2005:	284,480
Jan – June 2006:	290,338
July – Dec 2006:	293,981
Jan – June 2007:	297,774
July – Dec 2007:	299,716
Jan – June 2008:	313,593
July - Dec 2008:	305,364

See the 2008 EDDS Annual Report for more detailed information.

Total Number of ED Discharges by Month and Year, San Diego County, July 2005—December 2008



Source: HASD&IC, CHIP, CoSD HHSA PHS EMS, ED database July 2005-Dec 2008

The 2008 EDDS Annual Report can be found at: www.SanDiegoCountyEMS.org, www.hasdic.org, or www.sdchip.org.

January - June 2009 data are currently being collected and processed.



For More Information, Contact:

Holly Shipp, MPH
County of San Diego,
Health & Human Services Agency,
Public Health Services,
Emergency Medical Services

Phone: (619) 285-6429
Holly.Shipp@sdcounty.ca.gov

For Copies of EDDS Reports:
www.SanDiegoCountyEMS.com
or
www.sdchip.org
or
www.hasdic.org



EDDS Project Description

The Community Health Improvement Partner's Suicide Prevention Work Team, in collaboration with the County of San Diego's Emergency Medical Services (EMS) and the Hospital Association of San Diego and Imperial Counties (HASD&IC) conceptualized and coordinated the implementation of the Emergency Department Data Surveillance (EDDS) project.

Emergency department (ED) discharge data describe all patients who were treated and discharged from participating emergency departments in San Diego County. ED data does not represent all patients who go to the emergency department; patients who were admitted to the hospital from the ED are not included. The information contained in this database is collected from billing data, so if a patient presents to the ED and is admitted to that same hospital, all information is transferred to the inpatient record and the patient becomes part of the hospital inpatient discharge database.

Emergency department data that are reported to Emergency Medical Services (EMS) do not contain unique identifiers, such as social security number. Each record represents a visit to the ED; multiple visits for the same person cannot be identified. Therefore, this report represents the number of *encounters* (visits), not the number of *people* who use the ED.

Currently, 16 out of the 18 civilian San Diego County EDs voluntarily report data, representing more than 97% of all ED discharges in San Diego County. These data represent medical encounters for less severe non-fatal injury or illness than seen among hospital discharges.

Current Data Reporting Status

All emergency department (ED) discharge data for participating hospitals have been reported for 2008 (January – December). First and second quarter data for 2009 (January-June) are currently being reported to EMS.

Hospitals are asked to submit their data to Holly Shipp at Emergency Medical Services at the same time they submit to OSHPD.

If an extension has been filed with OSHPD, please notify Holly of the anticipated date

of submission by calling 619-285-6429 or emailing: Holly.Shipp@sdcounty.ca.gov.

All hospitals have reported first quarter data, and three have reported second quarter data. Thank you!

Upcoming Changes - Language Spoken

The Office of Statewide Health Planning and Development (OSHPD) began collecting Principal Language Spoken effective for ED discharges and encounters on or after January 1, 2009. Data for the January-March 2009 report period required a new file format to accommodate Principal Language Spoken. Submission of these data began in April 2009. For more informa-

tion, visit: www.oshpd.ca.gov/HID/MIRCa/Newly_Approved_Regulations.html

Hospitals are asked to continue submitting an identical data set to EMS, *including the new language variable*, in the same format as submitted to OSHPD.

This is an exciting addition to the EDDS database! The October issue of this news-

letter will examine the relationship of language spoken to various characteristics of ED discharges.