

Montana Hospital Discharge Data System

The Montana Hospital Discharge Data System



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Dataset orientation for Montana DPHHS – Public Health and Safety Division, August 2015

The Montana Hospital Discharge Data System





Making Everything Easier!TM

Novelty Edition

Montana Hospital Discharge Data System

FOR
DUMMIES[®]

Learn to:

- Use Diagnosis Codes
- Understand Prevention Quality Indicators
- Pronounce Strange Acronyms

Alfred E. Neuman



Overview

- Inpatient hospitalizations: 2000-2014
- Emergency department encounters: 2010-2014



Overview

- Data received from Montana's Hospital Association, MHA
 - Inpatient Prospective Payment System (IPPS) Hospitals
 - Most Critical Access Hospitals (CAH)



Overview

1		2		3A. PAT. CMT. #		4. TYPE OF BILL	
3B. PAT. CMT. #		3C. PAT. CMT. #		5. FREQ. TAX INCL.		6. STATEMENT COVER PERIOD FROM THROUGH	
8. PATIENT NAME		9. PATIENT ADDRESS					
10. BIRTHDATE		11. SEX		12. DATE ADMITTED		13. ICD-9 CODE	
14. ICD-9 CODE		15. ICD-9 CODE		16. ICD-9 CODE		17. ICD-9 CODE	
18. ICD-9 CODE		19. ICD-9 CODE		20. ICD-9 CODE		21. ICD-9 CODE	
22. OCCURRENCE CODE		23. OCCURRENCE DATE		24. OCCURRENCE CODE		25. OCCURRENCE DATE	
26. OCCURRENCE SPAN FROM THROUGH		27. OCCURRENCE SPAN FROM THROUGH		28. OCCURRENCE SPAN FROM THROUGH		29. OCCURRENCE SPAN FROM THROUGH	
30. VALUE CODES		31. VALUE CODES		32. VALUE CODES		33. VALUE CODES	
34. VALUE CODES		35. VALUE CODES		36. VALUE CODES		37. VALUE CODES	
38. VALUE CODES		39. VALUE CODES		40. VALUE CODES		41. VALUE CODES	
42. REV. CD.		43. DESCRIPTION		44. MPCS/1 BMS/1 MPCS CODE		45. SERV. DATE	
46. SERV. UNITS		47. TOTAL CHARGES		48. NEW CHARGES		49.	
50. PAYOR NAME		51. HEALTH PLAN ID		52. PLAN DATE		53. PLAN RATE	
54. PRECIP. PAYMENTS		55. EST. AMOUNT DUE		56. NET PAY		57. OTHER PAY ID	
58. INSURED'S NAME		59. FPEL		60. INSURED'S UNIQUE ID		61. GROUP NAME	
62. PERFORMANCE GROUP NO.		63. TREATMENT AUTHORIZATION CODES		64. DOCUMENT CONTROL NUMBER		65. EMPLOYER NAME	
66. NET PAY		67. PAYMENT REASON DE		68. OTHER PROCEDURE CODE		69. OTHER PROCEDURE DATE	
70. ATTENDING		71. OPERATING		72. OTHER		73. OTHER	
74. LAST		75. LAST		76. LAST		77. LAST	
78. OTHER		79. OTHER		80. OTHER		81. OTHER	
82. REMARKS		83. APPROVED DATE INCL.		84. APPROVED DATE INCL.		85. APPROVED DATE INCL.	
86. APPROVED DATE INCL.		87. APPROVED DATE INCL.		88. APPROVED DATE INCL.		89. APPROVED DATE INCL.	



Overview

- Three types of elements
 - Demographic (age, sex)
 - Medical (diagnosis (Dx) codes, procedures)
 - Insurance (payer, charges)



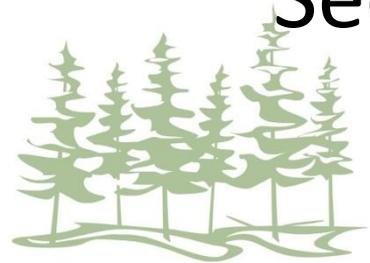
Overview

- Demographics
 - Age
 - Sex
 - Dates of admission



Overview

- Medical
 - Dx codes (ICD-9-CM): Primary / Eight Secondary
 - Surgical procedures (Inpatient): Principal / Five Secondary
 - CPT procedures (ED): Principal / Five Secondary



Medical

- Diagnosis Codes
 - Billing
 - Meaningful use
 - Epidemiology



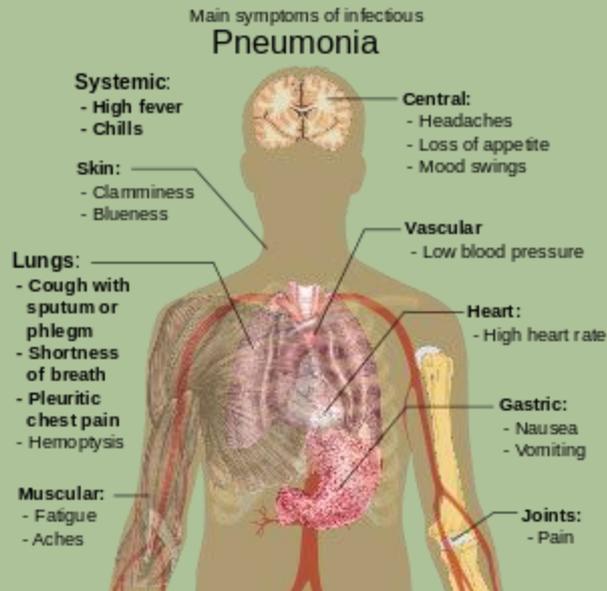
Medical

- Diagnosis codes (Dx): Why is the patient there



Medical

- 486: Pneumonia



Medical

- 250.xx: Diabetes Mellitus



Medical

- 250.xx: Diabetes Mellitus (4th digit)
 - 250.1x: No complication
 - 250.2x: Ketoacidosis
 - 250.3x: Other coma
 - ...
 - 250.9x: Unspecified complication



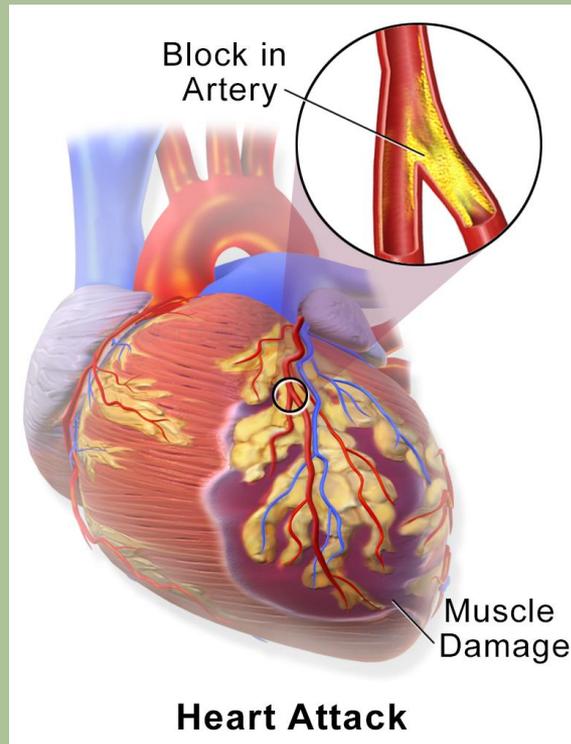
Medical

- 250.xx Diabetes mellitus (5th digit)
 - 250.x0 type II or unspecified type, not stated as uncontrolled
 - 250.x1 type I, not stated as uncontrolled
 - 250.x2 type II or unspecified type, uncontrolled
 - 250.x3 type I, uncontrolled



Medical

- 410.xx: Acute Myocardial Infarction



Medical

- ICD-9-CM: <http://www.icd9data.com/>



Medical

- Primary Diagnosis
 - Chiefly responsible for admission



Medical

- Secondary diagnosis
 - Conditions that coexist, or develop, that affect treatment or length of stay



Medical

- ICD-9-CM through Sept 30, 2015
- ICD-10-CM begins Oct 1, 2015



Medical

- For more information about transition see “[ICD-10 Transition: Challenges and Opportunities for the 21st Century \(May 2015\)](#)”



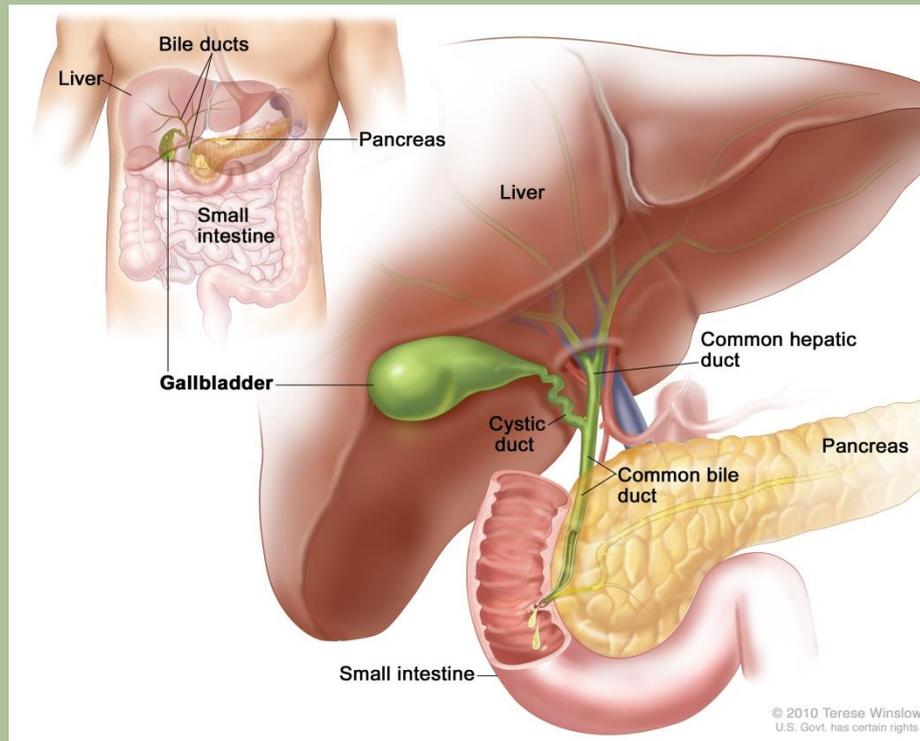
Medical

- ICD-9 Surgical Procedures (Inpatient):
What was done to the patient



Medical

- 51.2x Cholecystectomy



Medical

- 64.0 Circumcision



Medical

- 36.14 (Aorto)coronary bypass of four or more coronary arteries



Medical

- ICD-9 Procedures
 - <http://icd9cm.chrisendres.com/>



Medical

- Current Procedural Terminology (CPT; ED): What was done to the patient



Medical

- Evaluation and Management (E/M)
 - 99281 (Least complex) to 99285 (Most complex)



Medical

- E/M 99281:
 - Exam - problem focused
 - Medical Decision Making – straightforward
 - Presenting Problem – self-limited or minor



Medical

- E/M 99285:
 - Exam - comprehensive
 - Medical Decision Making – high
 - Presenting Problem – high severity



Medical

- (CPT; ED):
 - 12001: Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and / or extremities (including hands and feet); 2.5 cm or less



Medical

- CPT codes, descriptions and other data only are copyright 2014 American Medical Association. All rights reserved. CPT is a registered trademark of the American Medical Association (AMA).



Medical

- External Cause of Injury Codes (E-Codes):
What lead to injury
 - E905.3 Sting of hornets, wasps, and bees





Medical

- E-codes:
 - As many as describe the injury
 - Place of occurrence
 - Activity status (work, volunteer, military, other)
 - Activity type



http://dphhs.mt.gov/Portals/85/publichealth/documents/Epidemiology/MTHDDS/Surveillance%20Reports/ED-Encounters-and-Admissi

mt.gov

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Office of Epidemiology
and Scientific Support

Montana Hospital Discharge Data System

January 2015

**Emergency Department Encounters and Inpatient Admissions
for Injuries from Outdoor Recreational Activities¹**

Cody L. Custis, MS, Montana Hospital Discharge Data System

Introduction

Outdoor recreation and tourism are major contributors to the Montana economy. Residents and visitors spend approximately \$5.8 billion each year on recreation.² Approximately one third of outdoor recreational participants are out-of-state visitors. The most popular recreational activities such as skiing and snowboarding, snowmobiling, off-road vehicle riding, and horseback riding are inherently risky. We looked at recreational injuries treated at Montana emergency departments (EDs) or requiring inpatient admission to Montana hospitals from 2011 to 2013 from these four activities.³

The most common recreational activity resulting in injury that we examined was skiing and snowboarding, followed by off-road vehicle riding, horseback riding, and snowmobile riding. Over 90% of injuries from skiing were treated at EDs; a higher proportion of injuries from snowmobiling and off-road vehicle riding (26% and 19%) required admissions as inpatients (Figure 1).

Figure 1. Most Common Causes of Recreational Injuries Treated in Montana Emergency Departments and Hospitals, 2011-2013



Category	Number of Events
Category 1	147
Category 2	213

ber of events

2000
1500
1000

MONTANA
PHHS
People. Healthy Communities.
Department of Public Health & Human Services

Medical

- Source of admission
 - Point of origin, June 1, 2007
 - ED is no longer a source of admission



Medical

- Discharge status
 - Routine discharge
 - Discharge to care
 - Expired



Insurance

- Primary payer
 - Medicare
 - Medicaid
 - Commercial



Insurance

- Total charges
 - Statewide level
 - Charges, not reimbursement





Data Use Agreement

- Outlines data use
 - Stored in secure directory
 - Do not release to third parties
 - Guidelines for release



Data Use Agreement

- Statewide guidelines
 - Rates for 20 or more events
 - Discretionary for less than five



Data Use Agreement

- Stratified guidelines
 - No counts less than five
 - Institutional confidentiality



Data Use Agreement

- If it's released to the anyone without an agreement, it's released to the public



Data Use Agreement

- Focus on the results
 - Table shells
 - Program knowledge



Data Use Agreement

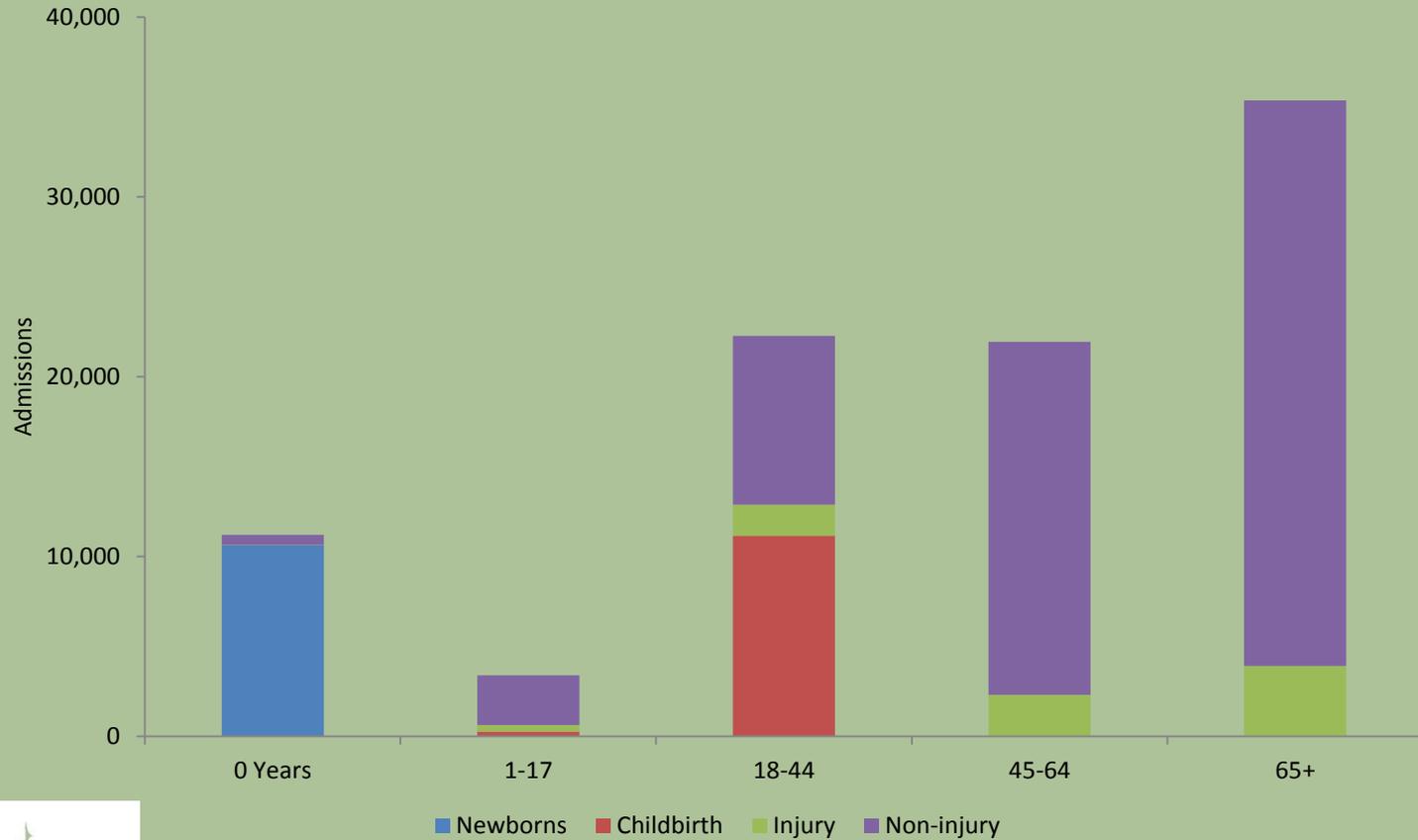
- Job log
 - *Who* is asking for information?
 - *Why* does the person need information?
 - *What* is given to that person?





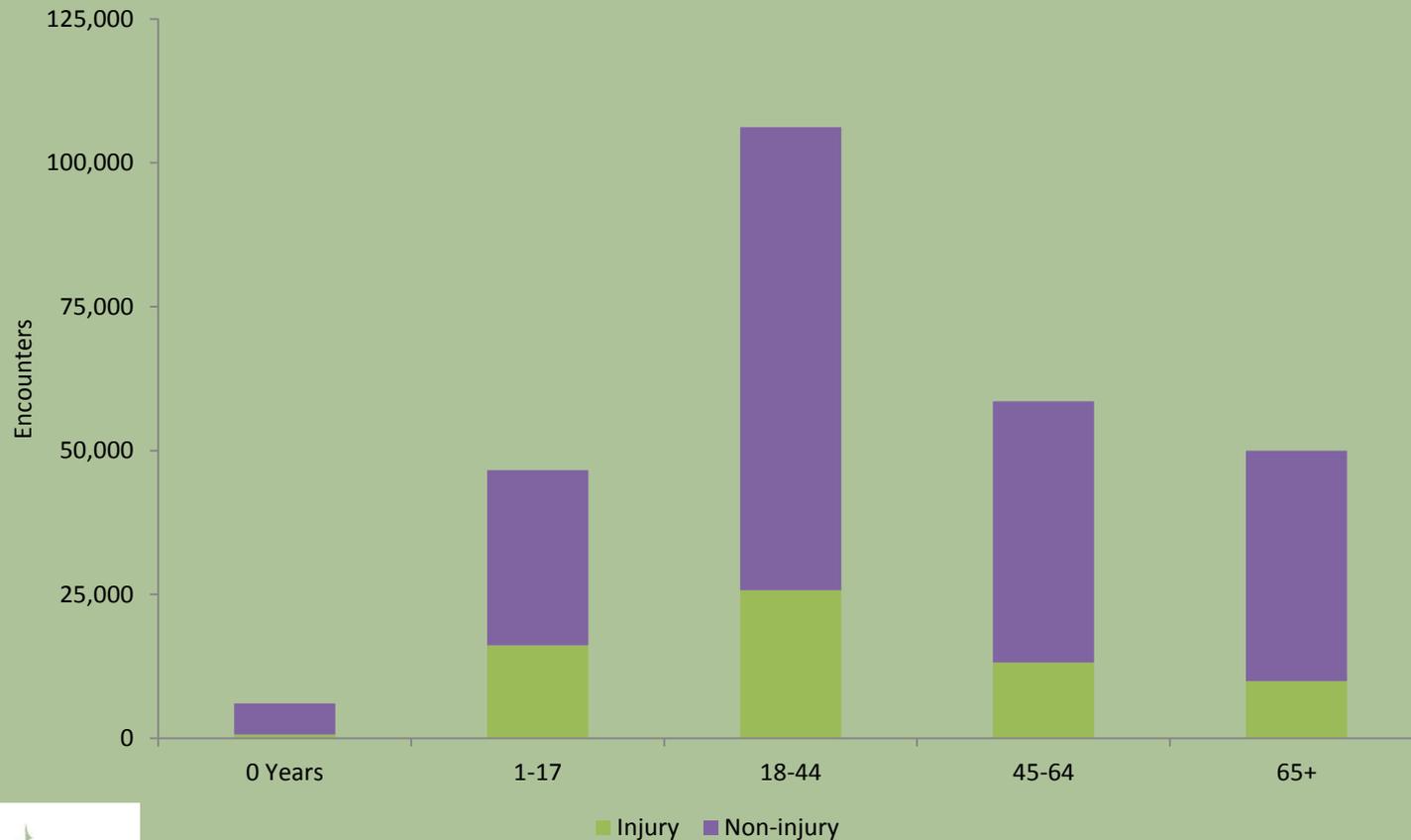
Basic Analysis

Inpatient Admissions, Montana, 2014, by Type and Age; Montana Hospital Discharge Data System



Basic Analysis

Emergency Department Encounters, Montana, 2014, by Type and Age; Montana Hospital Discharge Data System





Previous Uses

- Reports
- Data requests



Reports

- Neonatal Abstinence Syndrome (NAS)
- Alcohol abuse
- Outdoor recreation
- Non-urgent utilization



Data Requests

- Pedestrian injuries
- Heatstroke
- Falls in older adults
- Stroke admissions





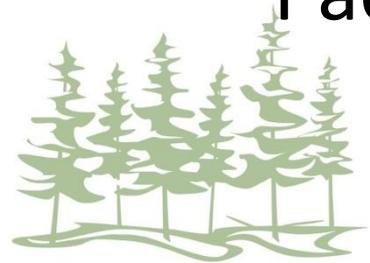
Population Estimates

- National Center for Health Statistics
 - Series from 1990-2014



Population Estimates

- How detailed?
 - Year
 - Single year of age
 - County
 - Sex
 - Hispanic origin, bridged race (White, Black, American Indian / Alaska Native, Asian / Pacific Islander)



Population Estimates

- The vintage 2014 estimate, of the 2011, Asian / Pacific Islander, aged 27, residing in Dawson county, females:
- 0



Population Estimates

- The vintage 2014 estimate of the 2011 Dawson county population: 9,006
- The vintage 2014 estimate of the 2011 statewide population of females ages between 15 and 44 years: 180,888



Population Estimates

- Annual
 - Updated by NCHS
 - Each vintage has updated estimates
 - 2014 estimate for 2011 is not the same as 2011 estimate for 2011



Population Estimates

- 'National Center for Health Statistics.'
- ' Bridged-race intercensal estimates of the July 1, 1990-July 1, 1999; July 1, 2000-July 1, 2009'
- ' Postcensal estimates of the resident population of the United States for July 1, 2010-July 1, 2014'
- ' United States resident population by year, county, single-year of age, sex, bridged race, and Hispanic origin,'
- ' prepared by the U.S. Census Bureau with support from the National Cancer Institute.'
- ' Available on the Internet at:
<http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm> as of April 24, 2004; Oct 26, 2012; **June 30, 2015**;



For More Information

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