



PREVENTION OPPORTUNITIES UNDER THE BIG SKY

January Public Health Quiz: Hospital Admissions and Emergency Department Visits

The Montana Hospital Discharge Data System receives inpatient and Emergency Department (ED) data from more than 90% of the hospitals in Montana through a Memorandum of Agreement with the Montana Hospital Association. These data are used to examine the burden of a number of conditions, including injuries, infectious disease, and chronic conditions. Test your knowledge about hospitalizations and ED encounters for 2013.

1. Which of the following age groups had the highest rate of inpatient admission in Montana?
- Infants under 1 year
 - Children and teens age 1 to 19 years
 - Adults age 20-59 years
 - Seniors age 60 years and older

2. What was the most common reason for admission to the hospital?
- Injury and poisoning
 - Non-specific symptoms and signs
 - Heart disease
 - Childbirth and newborns

3. Match the age group with their most common reason for admission to the hospital:
- | | |
|------------------------|--------------------------------|
| ___ 1 to 14 years | a. Musculoskeletal diseases |
| ___ 15 to 44 years | b. Respiratory system diseases |
| ___ 45 to 64 years | c. Pregnancy and childbirth |
| ___ 65 years and older | d. Circulatory system diseases |

4. What percentage of Montana adults admitted to the hospital, for diagnoses excluding childbirth and injuries, have a history of current or former tobacco use documented in the system?
- 16%
 - 34%
 - 50%
 - 75%

5. Which of the following was the most common reason for an ED visit for Montana residents in 2013?
- Injury and poisoning
 - Non-specific symptoms and signs
 - Heart attack and stroke
 - Cancer

6. There were 1,054 admissions for hip fracture in 2013. What was the most common cause of these injuries?
- Falls at home
 - Occupational injuries
 - Car crashes
 - Accidents at long-term care facilities

7. How many individuals were admitted for vaccine-preventable diseases in 2013?
- 204
 - 408
 - 812
 - 1,624

8. Which age group had the highest proportion of total admissions and emergency department visits for mental health diagnoses, computed as mental health visits/total visits per age group?

<u>Admissions</u>	<u>ED Encounters</u>
a. Under 18 years	a. Under 18 years
b. 18 to 44 years	b. 18 to 44 years
c. 45 years and older	c. 45 years and older

Answers:

- (a) Because nearly all infants are born in hospitals, infants have the highest admission rate at 947.2 per 1,000 population; 93% were for normal births. The age group with the second highest rate was seniors at 168.7/1,000.
- (d) 24% of all admissions were for mothers having normal deliveries and infants following normal births.
- 1 to 14 years: (b) Respiratory system diseases; 15 to 44 years: (c) Pregnancy and childbirth; 45 to 64 years: (a) Musculoskeletal diseases; 65 years and older: (d) Circulatory system diseases.
- (a) 16% of non-childbirth, non-injury adult admissions had an indication of current or former tobacco use; 7% of women admitted for births and 19% of adults admitted for injuries had an indication of current or former tobacco use. 5. (b) 24% (n=57,261) of all ED encounters were for non-specific

symptoms and signs. Many of these conditions could probably be treated in physicians' offices or urgent care clinics.

6. (a) 59% of hip fracture injuries *that had a location coded* occurred at home and 23% occurred at residential institutions. However, 63% of hip fractures had no location coded. The average age for individuals admitted for hip fractures was 78 years. Following hospitalization for hip fracture, 81% of all patients were discharged to residential institutions or long term care facilities, underscoring how debilitating these injuries can be.

7. (b) There were 408 admissions for vaccine-preventable disease in 2013. Children under 5 years and adults over 65 years accounted for 9% and 51% of these admissions, respectively.

8. Mental health admissions: (b) Under 18 years, 6%; **18 to 44 years, 13%**; 45 years and older 4%. Mental health ED encounters: (b) Under 18 years, 3%; **18 to 44 years, 6%**; 45 years and older, 4%.

Recommendations

Montanans who want help giving up tobacco can call the Montana Quit Line at 1-800-QUIT-NOW, or visit the website at www.QuitNowMontana.com. Counselling, support, and free or discounted cessation products are available to all adult callers.

The risk of falls leading to hip fractures can be reduced by exercise to improve strength and balance, appropriate management of medications, checking vision, and eliminating tripping hazards in the environment.

Most admissions for vaccine preventable diseases can be prevented with age-appropriate immunizations and boosters. Immunizations protect individuals receiving them and help prevent the spread of communicable diseases to others who may not be immunized. It is especially important for individuals who have contact with infants to have boosters for highly communicable diseases such as pertussis that can be transmitted to infants before they have completed their vaccination series.

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