



PREVENTION OPPORTUNITIES UNDER THE BIG SKY

Montana Vital Statistics Quiz

Vital Statistics are a fundamental source of public health and epidemiologic data. The Montana Department of Public Health and Human Services has maintained vital records for Montana since 1907. These data help us identify and quantify health burdens experienced by our population and help us track our progress in improving health. The following six questions highlight major areas of public health concern in Montana. How many can you answer? (Answers are provided below.)

1. What percentage of homicides in Montana between 2006 and 2010 involved alcohol?
a.) 16%
b.) 60%
c.) 9%
d.) 74%
2. Which of the following substances is involved in approximately one third of all cancer deaths among Montana residents?
a.) Tobacco
b.) Alcohol
c.) Prescription drugs
d.) Over-the-counter drugs
3. What percentage of the babies born in Montana during 2010 were of low birth weight (less than 2500 grams or 5 lbs 8 oz)?
a.) 10%
b.) 8%
c.) 5%
d.) 1%
4. How much did the largest baby born in Montana during 2010 weigh?
a.) 16 lbs 1 oz (7,286 grams)
b.) 15 lbs 4 oz (6,917 grams)
c.) 14 lbs 15 oz (6,776 grams)
d.) 13 lbs 12 oz (6,237 grams)
5. What proportion of Montana women reported using tobacco during pregnancy in 2010?
a.) 15%
b.) 27%
c.) 5%
d.) 0
6. Which of the following was not a verified cause of an unintentional injury death in Montana?
a.) septic tank
b.) garden slug
c.) crashing a bicycle into a police car
d.) car air freshener

Program managers and epidemiologists from whom more information about these topics can be obtained is available at our website. And, if you have a smart phone with a QR code application, just scan the code in the upper right corner of this issue to access <http://www.dphhs.mt.gov/publichealth/preventionopportunities/index.shtml>.

Answers

1. **C.** 9% of homicides reported in Montana between 2006 and 2010 involved alcohol. In addition, 13% of unintentional injury deaths and 9% of suicides involved alcohol. Furthermore, the CDC describes alcohol as the third leading lifestyle-related cause of death in the United States, responsible for causing or exacerbating a variety of chronic diseases.¹
2. **A.** Tobacco is the single most preventable cause of cancer death in Montana. It is implicated in nearly one third of all cancers in sites as varied as the pancreas, stomach, cervix, colon, bladder, kidney, and liver, as well as the lungs and upper respiratory system. It is also the single most preventable cause of cardiovascular death. In fact, smoking causes 15% of all deaths in Montana, or about 1,300 each year.² This does not include the contribution of deaths attributable to smokeless tobacco, second-hand smoke, and structure fires caused by tobacco products.
3. **B.** 8% of babies born in Montana are of low birth weight. Low birth weight is a risk factor for infant mortality and developmental delays. Smoking cessation before or during pregnancy and early and

frequent prenatal care help prevent low birth weight. The Healthy People 2020 goal is to reduce the incidence of low birth weight to 7.8% of all live births.³ Montana is very close to achieving that goal.

4. **C.** 14 lbs, 15 oz. Giving birth to a baby that is large for gestational age (more than approximately 9 pounds or 4000 grams) is often a sign of gestational diabetes or of pre-existing maternal diabetes. In either case, it indicates that the mother should be evaluated for diabetes shortly after pregnancy.⁴ The large infant may be at risk for complications of pregnancy and delivery, of low blood sugar immediately after birth, and of becoming obese later in life.
5. **A. and B.** 15% of white mothers and 27% of American Indian mothers reported at least some cigarette smoking during pregnancy in 2010. Smoking during pregnancy contributes to low birth weight, preterm birth, and gestational hypertension, all of which are risk factors for infant mortality, including mortality from SIDS.⁵

6. **B.** Eating a garden slug. There is no record of a Montana resident dying from eating a slug, yet. A recent news story from Australia reported that a man was hospitalized for more than a month in serious condition after eating two garden slugs on a dare.⁶ The slugs were infected with a rat parasite that caused severe brain edema. The slugs were apparently infected by eating rat droppings. Slugs may also contain poisons as a result of eating slug bait or the leaves of toxic plants.

The other causes of unintentional death have occurred in Montana in recent years. Two Montana residents have drowned in septic tanks in separate incidents. A vehicle occupant got the trigger of a loaded rifle caught in the string of an air freshener hanging from the rear view mirror while removing the rifle from a gun rack and was killed when the rifle discharged; alcohol and other drugs were involved. The *Basic Firearm Safety Rules* of the Montana Fish, Wildlife, and Parks' Hunter Education Program instruct "NEVER carry a loaded firearm in a vehicle."⁷ Finally, an individual was killed by crashing a bicycle into a police car while fleeing the scene of a crime and failing to obey traffic lights.

Recommendation for health care providers

Provide accurate, complete, timely information on death and birth records to the Montana Office of Vital Statistics.

References:

1. <http://www.cdc.gov/alcohol/index.htm>
2. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5745a3.htm>
3. <http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=26>
4. <http://www.cdc.gov/ncbddd/bd/diabetespregnancy.htm>
5. http://www.cdc.gov/tobacco/basic_information/health_effects/pregnancy/
6. <http://www.nytimes.com/2011/10/18/health/18global.html>
7. http://www.hunter-ed.com/mt/course/ch4_safely_transporting_firearms.htm

2,275 copies of this public document were published at an estimated cost of \$0.67 per copy, for a total cost of \$1524.25, which includes \$ 518.49 for printing and \$1005.76 for distribution.



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