

# quick facts

## *About...Measles*

### **What is measles?**

Measles is a viral rash illness that is very contagious. Currently, measles is rare in the United States, but outbreaks still occur as a result of travel to or from other parts of the world. Measles may cause serious complications, including ear infection, pneumonia, and encephalitis (brain swelling). In some cases, measles may be fatal, especially in children under 5 years of age.

### **What are the symptoms of measles?**

People with measles generally appear very ill. Early symptoms of measles include:

- Runny nose
- Cough
- Drowsiness
- Loss of appetite
- Fever
- Spots inside the mouth resembling grains of salt (Koplik's spots)
- Increased sensitivity to light

Around the fourth day of illness, the fever usually increases (often to over 101°F), and a blotchy red (maculopapular) rash appears on the face and spreads downward to the rest of the body. The rash lasts about 4 or 5 days and then gradually fades in the same order it appeared.

### **How is measles spread?**

Measles is spread by contact with the nose or throat secretions of an infected person. This can happen when someone coughs or sneezes near someone else or someone touches objects contaminated with nose or throat drainage. Measles is extremely contagious, and virus particles can remain viable in the air up to two hours.

### **Who is at risk for measles?**

Anyone who has not received two doses of measles-containing vaccine is at risk for measles. While the United States does not have ongoing transmission of measles, measles remains a problem in many other parts of the world, including areas regularly visited for business and pleasure (including many parts of Europe). Everyone should have two doses

of measles containing vaccine (usually MMR, the measles-mumps-rubella vaccine). People traveling outside the United States should verify their vaccination histories. Children under the age of five, adults over the age of twenty, and people with weakened immune systems are at increased risk for complications associated with measles. Pregnant women who contract measles are at an increased risk for pregnancy-related complications, including miscarriage, premature delivery, and low-birth-weight in the infant.

#### **How do I know if I have measles?**

See your health care provider right away. If you have been exposed to someone with measles or you have symptoms that match those described above, your health care provider may test you for measles. Many other organisms can cause rash illnesses. If you have been vaccinated for measles, it is very unlikely that you have the disease.

*→ Alert your physician prior to your visit if you feel you've been exposed.*

#### **How is measles treated?**

Since measles is caused by a virus, antibiotics are not effective. Currently, there are no antiviral medications used to treat measles. Treatment focuses on relieving the symptoms of the illness.

#### **How can measles be prevented?**

The MMR vaccine is safe and effective for preventing measles infection. Most schools and licensed child-care providers require proof of vaccination or immunity to measles before entry. If you have not had measles and/or have no record of having the MMR vaccine, see your health care provider to decide if you should receive the vaccine. Two doses of vaccine normally provide lifelong immunity.

All information presented is intended for public use. For more information, please refer to: <http://www.cdc.gov/vaccines/vpd-vac/measles/in-short-adult.htm>.

This page was last reviewed on November 8, 2008.



**Indiana State  
Department of Health**

Feb 7, 2012

Talking Points

www.StateHealth.IN.gov

Background

Measles is a highly contagious respiratory disease caused by a virus. When infected persons sneeze or cough, droplets spray into the air. Those droplets remain active and contagious on infected surfaces for up to two hours.

Measles is rare in the United States due to high levels of vaccination with the Measles, Mumps, and Rubella (MMR) vaccine; however unvaccinated visitors from other countries can transmit measles to unvaccinated people in this country, or unvaccinated U.S. citizens traveling abroad can become infected during travel. Vaccination is the most effective way to prevent transmission.

Current Situation

As of February 7, the Indiana State Department of Health and Hamilton County Health Department are investigating two cases of measles in unvaccinated individuals that have been identified in Hamilton County, Indiana.

With measles, even one case is considered an outbreak—which is simply the occurrence of a disease at a higher than expected number of cases.

The situation in Central Indiana is under active investigation to identify additional cases and implement control measures.

We have deployed State Health Department staff to the local health department to help identify additional cases and contain the outbreak.

Symptoms

Measles begins with a fever, cough, runny nose, and red eyes about 7-10 days after exposure.

The fever increases and can get as high as 105 degrees.

Two to four days later, a rash starts on the face and upper neck. It spreads down the back and trunk, and then extends to the arms and hands, as well as the legs and feet. People can spread the infection to others before symptoms appear.

After about five days, the rash fades the same order in which it appeared.

Approximately 30 percent of reported measles cases have one or more secondary complications include pneumonia, otitis media, diarrhea, acute encephalitis, seizures, and death.

Recommendations

Individuals who are experiencing symptoms and/or believe they have been exposed to an infected individual should CALL their local health care provider to describe symptoms before going into the office. Alert your health care provider if you believe you have been exposed to an infected individual.

Remain far away from others, especially unvaccinated infants, people with diseases affecting their immune systems, and pregnant women.

## Additional Comments

· The measles vaccine is safe and effective.

· This outbreak demonstrates just how important it is for both children and adults to have a full set of immunizations. We've now had two outbreaks within the past year due to individuals not being vaccinated. The message is clear: vaccinations prevent disease.

· We encourage residents of Central Indiana and throughout the state to contact your health care provider to ensure your measles vaccinations are up-to-date.

· We have NO evidence that this outbreak is related to the June 2011 measles outbreak in northeastern Indiana.

**410 IAC 1-2.3-49 Disease intervention measures; responsibility to investigate and implement**

Authority: IC 16-19-3-4; IC 16-41-2-1

Affected: IC 16-41-2

Sec. 49. (a) Case reports submitted to the local health department or the department may be used for:

- (1) epidemiological investigation; or
- (2) other disease intervention activities;

as warranted. Prior approval from a patient is not required before releasing medical or epidemiological information to the local health department or the department.

(b) Unless otherwise indicated, the local health department in the jurisdiction where the patient is a resident is responsible for:

- (1) performing any epidemiological investigation required; and
- (2) instituting control measures.

(c) Upon receiving a reportable communicable disease report, local health officers must investigate the report within a reasonable time frame, immediately for diseases that shall be reported immediately, but usually not more than seventy-two (72) hours after the report is received for other diseases. A local health officer in receipt of a report of a disease that is:

- (1) potentially dangerous to the public health; or
- (2) of national or international significance;

not otherwise listed as a reportable disease in this rule, shall notify the department immediately by telephone or other confidential means.

(d) Investigation shall include obtaining laboratory and clinical data necessary for case ascertainment. Investigation efforts should identify all potential means for disease acquisition, risk factors, and any potential public health threats posed by the case. Findings of the investigation shall be used to institute control measures to minimize or abrogate the risk of disease spread.

(e) The results of each individual case investigation shall be documented, in writing, with a copy maintained at the local health department, and a copy forwarded to the department communicable disease section within a reasonable time frame of receiving the initial communicable disease report. Local health departments that do not have the necessary security to maintain complete confidentiality of HIV/AIDS patients may defer the storage of all copies to the department.

(f) The department may request and obtain epidemiological information on cases of communicable disease or diseases of public health importance, including the following:

- (1) Outbreaks.
- (2) Diseases caused by drug-resistant organisms.
- (3) Emerging infectious diseases.

(g) Pursuant to 45 CFR 164.512 (2002), the department is a public health authority as defined by the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and the Privacy Rule. The department is authorized to receive protected health information, wherever maintained, without patient authorization for the purposes of public health surveillance, investigation, and interventions and as otherwise permitted by law. (*Indiana State Department of Health; 410 IAC 1-2.3-49; filed Sep 11, 2000, 1:36 p.m.: 24 IR 342; readopted filed Nov 8, 2006, 1:53 p.m.: 20061122-IR-410060424RFA; filed Nov 12, 2008, 3:53 p.m.: 20081210-IR-410080062FRA*)

**410 IAC 1-2.3-50 Confidentiality of medical and epidemiological information**

Authority: IC 16-19-3-4; IC 16-41-2-1

Affected: IC 16-18-2; IC 16-41; IC 34-43-1-12; IC 36-2-14-21

Sec. 50. (a) All information obtained under this rule, whether from patient records or other sources, is confidential as specified by IC 16-41-8-1(a).

(b) Except as provided in subsection (a), a person responsible for recording, reporting, or maintaining information required to be reported under IC 16-41-2 who recklessly, knowingly, or intentionally discloses or fails to protect medical or epidemiological information classified as confidential under this section commits a Class A misdemeanor.

(c) In addition to subsection (b), a public employee who violates this section is subject to discharge or other disciplinary action under the personnel rules of the agency that employs the employee.

(d) Release shall be made of the medical records concerning an individual to:

- (1) the individual;
- (2) a person authorized in writing by the individual to receive the medical records; or
- (3) a coroner under IC 36-2-14-21.

(e) An individual may voluntarily disclose information about the individual's communicable disease.

(f) The provisions of this section regarding confidentiality apply to information obtained under IC 16-41-1 through IC 16-41-

16. For purposes of compliance with the confidentiality provisions of IC 34-43-1-12, only the following diseases and conditions shall be defined as dangerous communicable diseases:

- (1) Acquired immunodeficiency syndrome.
- (2) Gonorrhea.
- (3) Hepatitis, viral.
- (4) HIV infection/disease.

## **Indiana authorities to be used in the event of an outbreak**

### **IC 16-19-3-1**

#### **Supervision of health and life of citizens; necessary powers**

Sec. 1. The state department shall supervise the health and life of the citizens of Indiana and shall possess all powers necessary to fulfill the duties prescribed in the statutes and to bring action in the courts for the enforcement of health laws and health rules.

*As added by P.L.2-1993, SEC.2.*

### **IC 16-19-3-9**

#### **Quarantine**

Sec. 9. The state department may establish quarantine and may do what is reasonable and necessary for the prevention and suppression of disease.

*As added by P.L.2-1993, SEC.2.*

### **IC 16-19-3-10**

#### **Epidemics**

Sec. 10. The state department may order schools and churches closed and forbid public gatherings when considered necessary to prevent and stop epidemics.

*As added by P.L.2-1993, SEC.2.*

### **IC 16-41-2-1**

#### **Rules**

Sec. 1. The state department may adopt rules under IC 4-22-2, including emergency rules under IC 4-22-2-37.1, that do the following:

(1) Define and classify the following:

(A) Communicable diseases.

(B) Other diseases that are a danger to health based upon the characteristics of the disease.

(2) Establish reporting, monitoring, and preventive procedures for communicable diseases.

*As added by P.L.2-1993, SEC.24. Amended by P.L.8-2008, SEC.2.*

### **IC 16-41-3-1**

#### **Rules; procedures; notice**

Sec. 1. (a) The state department may adopt rules under IC 4-22-2 concerning the compilation for statistical purposes of information collected under IC 16-41-2.

(b) The state department shall adopt procedures to gather, monitor, and tabulate case reports of incidents involving dangerous communicable diseases or unnatural outbreaks of diseases known or suspected to be used as weapons. The state department shall specifically engage in medical surveillance, tabulation, and reporting of confirmed or suspected cases set forth by the Centers for Disease Control and Prevention of the United States Department of Health and Human Services and the United States Public Health Service of the United States Department of Health and Human Services.

(c) The state department shall notify the:

(1) department of homeland security;

(2) Indiana State Police; and

(3) county health department and local law enforcement agency having jurisdiction of each unnatural outbreak or reported case described in subsection (b); as soon as possible after the state department receives a report under subsection (b). Notification under this subsection must be made not more than twenty-four (24) hours after receiving a report.

*As added by P.L.2-1993, SEC.24. Amended by P.L.156-2001, SEC.4; P.L.1-2006, SEC.304.*

#### **410 IAC 1-2.3-51 General control measures**

Authority: IC 16-19-3-4; IC 16-41-2-1

Affected: IC 16-41-2; IC 16-41-9

Sec. 51. General control measures are as follows:

(1) A local health officer or the commissioner, upon being notified of the existence of any communicable disease covered by a specific control measure in this section, shall ensure that the procedures required under the rule for the specific disease are carried out.

(2) A local health officer or the commissioner, upon learning or being notified of communicable diseases that are not covered by any specific control measures in this section, shall place such restrictions upon the movements of cases or carriers and their contacts as may be reasonably necessary to prevent the spread of disease. Specific control measures for the selected diseases or conditions are listed in sections 52 through 112 of this rule. Control measures for diseases or conditions not listed insofar as applicable:

(A) are detailed in the procedures prescribed in the Control of Communicable Diseases Manual, 18th Edition, 2004, a publication of the American Public Health Association; and

(B) shall be followed to the extent that they are not in conflict with the laws of Indiana or this rule. In addition, the procedures implemented by the local health officer or the commissioner shall include provisions for proper hand washing procedures and universal precautions as defined in this rule.

(3) A local health officer, upon notification of the occurrence of a disease that is required by sections 47 and 48 of this rule to be reported immediately, shall in turn notify the department immediately by telephone or other instantaneous means of communication.

(4) A local health officer, in receipt of reports required by sections 47 and 48 of this rule to be reported in either seventy-two (72) hours or one (1) week, shall, on each Friday, or if Friday is a holiday, the previous business day, forward to the department electronic or paper copies of reports received during the previous seven (7) days and not yet forwarded. Upon suspicion of an outbreak, the local health officer shall notify the department immediately, by telephone or other instantaneous means of communication. More frequent reports shall be furnished during an outbreak as required by the department.

(5) A local health officer in receipt of a report of a disease that is potentially dangerous to the public health, or of national or international significance not listed as a reportable disease in

section 47 or 48 of this rule, shall notify the department immediately by telephone or other confidential means of communication to establish reporting requirements for additional reports of that disease that subsequently may be received by the local health officer.

(6) The local health officer or the commissioner shall make an attempt to seek cooperation of cases, carriers, contacts, or suspect cases to implement the least restrictive, but medically necessary, procedures to protect the public health. Those procedures may include, but not be limited to, any of the following:

- (A) Participating in a designated education, counseling, or treatment program.
- (B) Undergoing confirmatory testing.
- (C) Undergoing medically accepted tests or treatments that are consistent with standard medical practice as necessary to make the case or carrier noninfectious.
- (D) Notifying or appearing before designated health officials for verification of disease status at periodic times.
- (E) Ceasing and desisting conduct that constitutes a health threat to others.
- (F) Being monitored by an electronic monitoring device to prevent activities that constitute a health threat to others.
- (G) Living part time or full time in a supervised setting.
- (H) Being confined to an appropriate:
  - (i) hospital;
  - (ii) home;
  - (iii) apartment; or
  - (iv) other institutional facility or residential setting.
- (I) Complying with any combination of the remedies under this subdivision considered appropriate by the health officer.

*(Indiana State Department of Health; 410 IAC 1-2.3-51; filed Sep 11, 2000, 1:36 p.m.: 24 IR 344; readopted filed Nov 8, 2006, 1:53*

*p.m.: 20061122-IR-410060424RFA; filed Nov 12, 2008, 3:53 p.m.: 20081210-IR-410080062FRA)*