

VACCINATE ADULTS!

from the Immunization Action Coalition — www.immunize.org

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Suspect Measles; Vaccinate Against Measles

The U.S. is currently seeing the largest number of measles cases in 15 years, with 156 confirmed cases reported between January 1 and June 17, 2011. Most of these cases—136—were associated with importations from measles-endemic countries or countries where large outbreaks are occurring, primarily countries in Europe, Africa, and Asia. Health departments across the U.S. have issued press releases announcing measles cases. To access some of these releases, go to www.immunize.org/newreleases/state-local.asp.

Easily transmitted through the air, the measles virus is highly contagious: Following exposure, more than 90 percent of susceptible people develop measles. Given how contagious measles is, it is imperative that healthcare professionals recognize measles in healthcare settings and isolate patients with suspected measles from other patients.

Suspect measles

Because measles cases are occurring all across the U.S., you must maintain a high index of suspicion for this disease. A succinct summary of the signs and symptoms of measles appears in the Ask the Experts section below and continues on page 16. To view a collection of photos of people with measles, visit IAC's website at www.immunize.org/photos/measles-photos.asp.

Isolate patients with suspected measles: Your front desk staff, appointment scheduler, and office nurse are your practice's first line of defense in identifying patients who might be infected with measles. When scheduling a visit for a patient with a rash illness, make sure the scheduler either refers the caller to the office nurse, or is him- or herself well trained to ask appropriate questions so that a patient who might have measles is not allowed to enter the practice through the main waiting area where other patients potentially would be exposed. Ideally, any patient suspected of having measles should enter through a separate entrance and should be isolated from all other patients in a private room with the door closed. Do not use this patient's exam room for ANY patients for at least two hours after the suspected measles patient has left.

Follow infection control guidance: If you suspect your patient might have measles, contact your local health department while the patient is still in your office to determine the next steps for clinical evaluation, testing, and follow-up.

For helpful guidance on infection control in your healthcare setting, see the online document from the California Department of Public Health

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Ask the Experts

IAC extends thanks to our experts, medical epidemiologist Andrew T. Kroger, MD, MPH; nurse educator Donna L. Weaver, RN, MN; and medical epidemiologist William L. Atkinson, MD, MPH. All are with the National Center for Immunization and Respiratory Diseases, Centers for Disease Control and Prevention (CDC).

Please provide some details about the measles cases we're experiencing across the United States.

We are currently seeing an increased number of measles importations into the U.S. due to recent increases in measles cases in countries commonly

visited by U.S. travelers (e.g., France, India). During 2001–08, a median of 56 measles cases were reported to CDC each year. By contrast, during the first 19 weeks of 2011, 23 states reported 118 cases. Of the 118 cases, 89% were associated with importation from other countries.

Of the 118 cases, 47 (40%) resulted in hospitalization. All but one hospitalized patient were unvaccinated. The vaccinated patient reported having received 1 dose of measles-containing vaccine and was hospitalized for observation only.

Measles-mumps-rubella (MMR) vaccine is safe and highly effective in preventing measles and its complications. Maintaining high immunization rates with MMR vaccine is the cornerstone of outbreak prevention.

How serious is measles?

Measles can lead to serious complications and death, even with modern medical care. The 1989–91 measles outbreak in the U.S. resulted in over 55,000 cases and more than 100 deaths. The current outbreak in France has resulted in 10,000 cases during the first four months of 2011, including 12 cases of encephalitis, 360 cases of severe measles pneumonia, and 6 measles-related deaths. Of the 118 cases reported in the U.S. in the first 19 weeks of 2011, 40% had to be hospitalized and nine had pneumonia.

What are the signs and symptoms healthcare providers should look for in diagnosing measles?

Healthcare providers should suspect measles in patients with a febrile rash illness and the clinically compatible symptoms of cough, coryza (runny nose), and/or conjunctivitis (red, watery eyes). A clinical case of measles is defined as an illness characterized by

- a generalized rash lasting 3 or more days, and
- a temperature of 38.3°C or higher (101°F or higher), and

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Immunization questions?

- Call the CDC-INFO Contact Center at (800) 232-4636 or (800) CDC-INFO
- Email nipinfo@cdc.gov
- Call your state health dept. (phone numbers at www.immunize.org/coordinators)

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• cough, coryza, and/or conjunctivitis.

Koplik spots, a rash present on mucous membranes, are considered pathognomonic for measles. Koplik spots occur from 1–2 days before the measles rash appears to 1–2 days afterward. They appear as punctate blue-white spots on the bright red background of the buccal mucosa.

Providers should be especially aware of the possibility of measles in people with fever and rash who have recently traveled abroad or who have had contact with international travelers.

Providers should immediately isolate and report suspected measles cases to their local health department and obtain specimens for measles testing, including viral specimens for confirmation and genotyping. Providers should also collect blood for serologic testing during the first clinical encounter with a person who has suspected or probable measles.

How contagious is measles?

Measles is highly infectious. It is primarily transmitted from person to person via large respiratory droplets. Airborne transmission via aerosolized droplets has been documented in closed areas (e.g., office examination room) for up to 2 hours after a person with measles occupied the area.

Following exposure, more than 90% of susceptible people develop measles. The virus can be transmitted from 4 days before the rash becomes visible to 4 days after the rash appears.

How long does it take to show signs of measles after being exposed?

It takes an average of 10–12 days from exposure to the appearance of the first symptom, which is usually fever. The measles rash doesn't usually appear until approximately 14 days after exposure, 2–3 days after the fever begins.

If a susceptible person is exposed to measles, can anything prevent them from developing the disease?

If the person has not been vaccinated, measles vaccine may prevent disease if given within 72 hours of exposure. Immune globulin (a blood product containing antibodies to the measles virus) may prevent or lessen the severity of measles if given within 6 days of exposure.

What are the recommendations for the use of MMR vaccine to prevent measles?

MMR vaccine is recommended routinely for all children at age 12–15 months, with a second dose at age 4–6 years. The second dose of MMR can be

given as early as 4 weeks (28 days) after the first dose and be counted as a valid dose if both doses were given after the child's first birthday. The second dose is not a booster, but rather is intended to produce immunity in the small number of people who fail to respond to the first dose.

Adults with no evidence of immunity (defined as documented receipt of 1 dose [2 doses 4 weeks apart if high risk] of live measles virus-containing vaccine, laboratory evidence of immunity, documentation of physician-diagnosed measles, or birth before 1957) should get 1 dose of MMR unless the adult is in a high-risk group. High-risk people need 2 doses; they include healthcare personnel, international travelers, students at post-high school educational institutions, people exposed to measles in an outbreak setting, and those previously vaccinated with killed measles vaccine or with an unknown type of measles vaccine during 1963–1967.

Infants age 6–11 months should receive 1 dose of MMR vaccine before international travel. Any dose of MMR administered before the first birthday should not be counted as part of the 2-dose series, and should be repeated when the child is age 12–15 months.

My adult patient doesn't remember if he ever received MMR vaccine or had measles disease and is planning an international trip. How should I handle this situation?

You have the choice of testing for immunity or just giving 2 doses of MMR at least 4 weeks apart. There is no harm in giving MMR vaccine to a person who may already be immune to one or more of the vaccine viruses. If you or the patient opt for testing, and the test indicates the patient is not immune to one or more of the vaccine components, give your patient 2 doses of MMR at least 4 weeks apart. If the test result is indeterminate or equivocal, consider your patient nonimmune. CDC does not recommend serologic testing after vaccination because commercial tests are not sensitive enough to detect vaccine-induced immunity reliably.

I'm a healthcare worker. How can I ensure I am protected against measles?

If you are a healthcare worker and you do not have acceptable evidence of immunity—documented receipt of 2 doses of live measles virus-containing vaccine at least 4 weeks apart or laboratory evidence of immunity—either get tested for immunity or get 2 doses of MMR at least 4 weeks apart. If you choose the testing route, and your result is negative, indeterminate, or equivocal, get 2 doses of MMR at least 4 weeks apart. CDC does not recommend serologic testing after vaccination.

I understand that at its June 2011 meeting, ACIP voted to recommend Tdap vaccination for pregnant women. Can you tell me more about this?

Yes. ACIP voted that women's prenatal healthcare providers administer Tdap to pregnant women who have not previously received their one-time dose of Tdap. Healthcare providers should

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administer Tdap to these women, preferably during the third trimester or late in the second trimester (after 20 weeks gestation). Alternatively, Tdap can be administered immediately postpartum. This national strategy is aimed at preventing pertussis in infants too young to be immunized. Infants younger than age 6 months account for most pertussis-related hospitalizations and deaths.

I understand that in March 2011, FDA expanded the age indication for Zostavax (shingles vaccine; ZOS; Merck) to include the vaccine's use in people age 50 through 59 years (while retaining the age indication for use in people age 60 years and older). Can you tell me what ACIP recommends about this?

At its June 2011 meeting, the ACIP reviewed the current status of ZOS licensure and the burden of herpes zoster (HZ) disease. ACIP declined to vote to expand the recommendations for the use of ZOS to include people age 50 through 59 years for the following reasons: (1) vaccines that contain varicella virus (i.e., varicella, ZOS, and MMRV vaccines) are in recurrent short supply in the U.S., (2) though the burden of HZ disease increases after age 50, disease rates are lower in this age group than they are in the 60-years-and-older age group, (3) currently, ZOS vaccination rates are less than 10 percent, and (4) a recommendation to vaccinate people age 50–59 years could result in more zoster disease if the limited supply of vaccine were to be given to people whose risk of disease is lower than that of older, more vulnerable adults.

Can pharmacists in all states administer Zostavax (ZOS)?

According to the American Pharmacist Association, 45 states currently allow pharmacists to administer ZOS, including many who administer it on a walk-in basis, using a protocol or standing orders. Not all pharmacists in the 45 states provide vaccination services, and of those who do, not all administer ZOS. It is best to call pharmacies ahead of time to find out if they have ZOS to administer to your patients.

Vaccinate Adults correction policy

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