

# Measles Outbreak in Arizona

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Eleven cases of measles have been confirmed in Pinal and Maricopa counties and more are suspected. Arizona Department of Health Services has issued recommendations for health care facilities to prevent spread and to facilitate diagnosis.

## Symptoms

Symptoms of measles include a generalized rash lasting more than 3 days, a temperature greater than or equal to 101.0°F, and 'the three C's'- cough, runny nose (coryza), and/or red, watery eyes (conjunctivitis). Other symptoms of measles may include loss of appetite, diarrhea (especially in infants), and swollen lymph nodes.

## Clinical Features

The incubation period of measles, from exposure to onset of symptoms is often between 8-12 days. Time between exposure and rash onset averages 14 days (range, 7-21 days).

The prodrome (symptoms prior to rash onset) lasts 2-4 days (range 1-7 days). It is characterized by fever, which increases in stepwise fashion, often peaking as high as 103°-105°F. This is followed by the onset of cough, coryza, or conjunctivitis.

Koplik spots, rashes present on mucous membranes, are considered to be characteristic of measles. They occur 1-2 days before the rash to 1-2 days after the rash, and appear as speckled blue-white spots inside the mouth.

The measles rash is a maculopapular eruption that usually lasts 5-6 days. It begins at the hairline, and then involves the face and upper neck. During the next 3 days, the rash gradually proceeds downward and outward, reaching the hands and feet. The maculopapular lesions are generally discrete, but may flow together, particularly on the upper body. Initially, lesions blanch with fingertip pressure. By 3-4 days, most of the lesions do not blanch with pressure. Fine shedding of the outer layers of the skin, or desquamation, occurs over more severely involved areas. The rash fades in the same order that it appears, from head to extremities.

Measles is spread by airborne transmission and by droplet spread. It is **extremely contagious** with 90% of susceptible persons with close contact contracting the illness.

Measles vaccination is very effective and persons with a history of two vaccinations are considered immune.