# Measles outbreak in California spreads to six other states 

Kevin Martinez

24 January 2015

A measles outbreak in California has now spread to six other states and Mexico, infecting at least 70 people, according to public health officials.

Measles is an extremely contagious respiratory disease and can be easily transmitted through public spaces like hospitals and schools. Measles can be dangerous especially to the elderly and small children, and can lead to blindness. According to the Center for Disease Control (CDC), for every 1,000 cases of measles, one or two children die.

The most recent outbreak in California has been linked to tourists visiting the Disneyland theme parks in Southern California last December, who most likely brought the disease from abroad. The majority of infections are in California, while Colorado, Utah, Washington and Oregon have also reported cases. Most patients reported feeling ill after visiting the park in December, while some people were exposed to others who traveled to the parks.

The incubation period (the time in which the measles is most transmittable) for people exposed at the Disney parks has ended, but many secondary infections can still occur, especially for people who have not been vaccinated. The symptoms include fever, runny nose, cough, and a rash all over the body. It is recommended that those who are contagious avoid public spaces and that unvaccinated people in contact with an infected patient be quarantined for 21 days.

The CDC recommends that children receive two doses of the measles-mumps-rubella (MMR) vaccine. The disease, declared to be eliminated in 2000, has made a comeback in the US, which saw 644 measles infections in 27 states last year. Most of the infections were brought from the Philippines, which experienced a measles epidemic. The disease can quickly spread among those who have not been vaccinated due to
personal beliefs or those too young to be vaccinated.
In California, two patients at the Oakland Medical Center's outpatient clinic exposed "less than 100 patients" to infection said Stephen Parodi, director of hospital operations for Kaiser Permanente, Northern California. To avoid spreading the virus, hospital staff had to close the rooms where the infected patients had been treated, and contact any patients who might have been exposed.

School officials in several California school districts told unvaccinated students to stay home after infected students showed up at school, including 24 students at Huntington Beach High School. Some parents have opted out of vaccinations because of a discredited study linking the vaccine to autism.
According to William Schaffner, an infectious disease expert at Vanderbilt University School of Medicine in Nashville, one dose of the MMR vaccine is about 92 percent effective, while a second dose is 98 percent effective. The measles vaccine's effectiveness can fade over several decades, however, and even countries in Western Europe have had large outbreaks of the disease, largely because of low vaccination rates.
This week, Disneyland and the California Department of Public Health told reporters that it was safe for tourists to visit the park unless they are unvaccinated. Officials also warned parents not to bring babies under 1 year old to Disneyland and other crowded venues that attract international travelers, such as airports. Disneyland has said that five employees have been infected and everyone who has been in contact with them have been put on paid leave.

Some parents have opted out of the mandatory vaccine shot for young children, citing personal beliefs. According to the LA Times, 9.5 percent of kindergartners at Capistrano Unified in south Orange

County (south of Los Angeles) in 2013 were exempted from measles shots citing personal beliefs, while the rate was 14.8 percent in Santa-Monica-Malibu Unified. The statewide rate for that year was 3.1 percent. Public health officials are worried that low vaccination rates can spread an already highly contagious disease.

Orange County Public Health Officer Dr. Eric Handler told the L.A. Times, "There's the tug here between a very effective vaccine and a very infectious virus. And so when you have a scenario where hundreds of people get exposed, then even if the vaccine is $99 \%$ good after two doses, you're going to have a handful of people who are going to get sick."

The last major outbreak of measles in California occurred in 1989 which caused 75 deaths in the state, out of 120 deaths nationwide. Since then, federal guidelines have recommended two doses of the vaccine. Prior to widespread use of the vaccine, the United States saw 4 million cases of measles every year, with 400 to 500 deaths. The vaccination of children entering public school, especially in making vaccines more available, led to the elimination of endemic measles infection in the US by 2000.

Despite this, measles, along with a host of other preventable diseases such as whooping cough, has returned to the United States. The reemergence of these preventable diseases has corresponded with intensification of the social crisis in the US, particularly since the onset of the 2008 economic downturn.


