

EPIDEMIC

Certain communicable diseases are required to be reported to the local health department according to the State of California Code of Regulations. Epidemiology and Assessment (E&A) unit's medical director, public health nurses, and epidemiologists investigate individual cases and outbreaks of reported communicable diseases.

See <http://www.ohealthinfo.com/docs/public/epi/diseases.pdf> for the list of reportable diseases.

Bioterrorism is a significant concern throughout the County and specifically Orange County. The intentional release of smallpox or other highly communicable diseases would tax all available medical resources within the County. Such an incident could cause a significant impact to life, safety and the economy of Orange County.

Currently the diseases of concern for epidemic in Orange County include: influenza, monkeypox, Severe Acute Respiratory Syndrome (SARS), and West Nile Virus (WNV). Around the world and the nation outbreaks of these diseases, except West Nile Virus, have been contained, however, the possibility of spread is a plausible threat to the County.

An influenza pandemic is one of the primary public health concerns of the 21st century. It is likely to occur in “waves” of infection, each lasting approximately 8 to 12 weeks and separated by weeks of inactivity. In total, it could last from 18 months to several years. An influenza pandemic is likely to affect everyone in Orange County at some point and can greatly impact “business as usual” in any sector of society or government. A pandemic will place a great strain on existing health care resources and may exceed health care resources. Personnel, supplies, equipment, and pharmaceutical responses (e.g., vaccination and antivirals) may be in short supply and/or unavailable and non-pharmaceutical responses (e.g., strict adherence to respiratory hygiene, hand washing, self isolation, and social distancing) will be the most effective strategies to limit transmission. This will make it difficult to pre-treat potentially exposed individuals and will limit treatment options once infection sets in. If transportation is compromised in the region or country, food and other essentials may be unavailable as well. Outbreaks are expected to occur simultaneously throughout much of the County and the State, which may limit the availability of mutual aid assistance and resources from other areas. The OA, with the leadership of the Orange County Health Care Agency (OCHCA), has developed a Pandemic Influenza Annex to this EOP that will support the OA’s response to this potential threat.

An additional public health threat that has epidemic/pandemic potential is the WNV. The WNV is a potentially serious illness that is most commonly spread by the bite of an infected mosquito. Experts believe the virus is established as a seasonal epidemic in North America that flares up in the summer and continues into the fall. WNV affects the central nervous system and symptoms vary.

- ***No Symptoms in Most People.*** Approximately 80 percent of people who are infected with WNV will not show any symptoms at all.
- ***Mild Symptoms in Some People.*** Up to 20 percent of the people who become infected will display mild symptoms, including fever, headache, body aches, nausea, vomiting, and sometimes swollen lymph glands or a skin rash on the chest, stomach, and back. Symptoms typically last a few days.
- ***Serious Symptoms in a Few People.*** About one in 150 people infected with WNV will develop severe illness. The severe symptoms can include high fever, headache, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, vision loss, numbness, and paralysis. These symptoms may last several weeks and neurological effects may be permanent.

OCHCA maintains statistical data on communicable diseases in the County. These statistics are based on the State mandated reportable diseases. See the HCA website for the statistics.

