



STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:

October 20, 2014

MEDICAL ADVISORY: SEPARATE CONFIRMED MEASLES CASES ON MAUI AND KAUAI WITH
POTENTIAL HEALTHCARE-RELATED AND COMMUNITY CONTACTS

Dear Healthcare Provider,

The Hawaii Department of Health (DOH) is investigating three separate cases of confirmed measles (rubeola); the one case on Maui and the two cases on Kauai have no relation to each other and have separate travel histories. Onsets of illness occurred from October 7–8, 2014, and all three were unvaccinated with history of recent international travel to either the Philippines or Indonesia and Malaysia. All made visits to primary care providers, and one required brief hospitalization. Measles diagnosis has been confirmed by polymerase chain reaction test for measles virus as well as by sera positive for measles IgM antibodies. Investigations of contacts are ongoing.

Clinicians are advised to consider potential measles infection in non-immunized persons, particularly anyone presenting with:

- Fever $\geq 101^{\circ}\text{F}$
- Upper respiratory symptoms (in particular cough, coryza, and conjunctivitis)
- Generalized morbilliform rash

Measles (rubeola) is still endemic in many developing counties but is also identified in an increasing number of outbreaks *particularly in areas where vaccination has been declining*. The virus is very contagious to unvaccinated and other susceptible persons (e.g., immunocompromised) via respiratory droplets, with a high number of secondary cases in susceptible households.

Illness generally presents 7–14 days after exposure with high fever (often $\geq 104^{\circ}\text{F}$) lasting 4–7 days, as well as lethargy, malaise, anorexia, conjunctivitis, cough, and coryza; duration of illness in a person with a normal immune system is usually 7–10 days. Koplik spots, the pathognomonic enanthem, may develop on the buccal mucosa 1–2 days before rash onset but are NOT always present. A blanching, erythematous maculopapular rash usually appears on the neck and trunk, spreading outwards to the extremities and lasts for 5–7 days before fading into hyperpigmented patches that desquamate. Individuals may be contagious from 4 days before to at least 4 days after rash onset, but immunocompromised patients can shed virus through their entire duration of illness.

Measles diagnosis should be confirmed through serologic testing (i.e., positive IgM, rising IgG). Treatment is generally supportive, including hydration and fluid replacement; vitamin A supplementation should be considered. Timely post-exposure prophylaxis can prevent or modify the course of illness and comprises either measles vaccination within 72 hours of exposure or

intramuscular immunoglobulin (IG; for those who cannot be vaccinated) within 6 days of exposure.

Persons with measles should be excluded from school or work for at least 4 full days after the patient's rash first appeared and/or the illness (fever) has resolved. Individuals who are exposed to the ill person and do not have immunity to measles or refuse vaccination should be excluded from school or work from the 7th to the 18th day after exposure to the ill person. Non-immune health care workers who have been exposed should be excluded from direct patient contact from the 5th-21st day after exposure, regardless of whether they received vaccine or IG after the exposure.

Providers are reminded that measles is an URGENT CATEGORY NOTIFIABLE CONDITION. Clinicians should contact HDOH as soon as measles is suspected. Do not wait for laboratory confirmation. If you have cared for patients meeting the above criteria or have any questions, please contact DOH by phone:

Oahu (Disease Investigation Branch) (808) 586-4586
Maui District Health Office (808) 984-8213
Kauai District Health Office (808) 241-3563
Big Island District Health Office (Hilo) (808) 933-0912
Big Island District Health Office (Kona) (808) 322-4877
After hours on Oahu (808) 566-5049
After hours on neighbor islands (800) 360-2575 (toll free)

Thank you for your assistance in protecting the health of our residents and visitors.

Sincerely,



Sarah Y. Park, MD, FAAP
State Epidemiologist
Hawaii Department of Health