



STATE OF HAWAII
DEPARTMENT OF HEALTH
KA 'OIHANA OLAKINO
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HONOLULU, HI 96801-3378

In reply, please refer to:
File:

April 10, 2023

MEDICAL ADVISORY: MEASLES INFECTION IDENTIFIED IN OAHU INTERNATIONAL TRAVELER

Clinicians are advised to:

1. **Be alert for cases of measles.** Consider measles in any patient with fever and morbilliform rash, especially in people with known exposure to a case of measles, with recent international travel or with exposure to a visitor from abroad or a US resident who has recently returned from international travel.
2. **Implement airborne precautions immediately** for all patients with fever and morbilliform and/or vesicular rash: identify, isolate, and provide a face mask for the patient to wear.
3. **Immediately report suspect cases** to the Hawaii Department of Health (HDOH)
4. **Coordinate diagnostic testing** of suspected cases with HDOH. Serologic testing for measles IgM is commercially available. Nasopharyngeal or throat swabs and urine specimens can be tested by PCR at the State Laboratories Division (SLD). Disease Outbreak Control Division (DOCD) approval is required before submission of specimens to SLD.
5. **Assess MMR status of your patients** and recall susceptible children to receive MMR vaccination according to routine MMR recommendations.

Dear Healthcare Provider:

The Hawaii Department of Health (HDOH) is investigating a case of confirmed measles (rubeola) in an unvaccinated Oahu resident returning from international travel. HDOH has identified the majority of individuals and groups who were exposed to this case during the infectious period and is working with them to prevent further transmission. However, additional measles cases may occur from exposures to this case, or in the future, due to measles contracted overseas. The period of infectivity of the confirmed case while in Hawaii ranged from March 28–April 4, 2023. The average incubation period for measles is 8–12 days from exposure to onset of symptoms and 14 days from exposure to appearance of the rash (range 7–21 days). Therefore, cases of measles resulting from exposure to this case may be expected from April 4–April 25, 2023.

MMR coverage rates have dropped in the general pediatric population, globally and nationally, since pre-pandemic years ([Global measles outbreak](#)). Hawaii has not experienced any recent outbreaks or transmission of measles within the state. However, with the large number of domestic and international visitors to Hawaii, it is critical to ensure our community is

appropriately protected against this highly contagious disease. Clinicians are urged to conduct an assessment of MMR status in both younger and school age children and recall those that remain unvaccinated or inadequately vaccinated. Additionally, we ask providers to ensure **all patients without presumptive evidence of immunity have been vaccinated according to current Advisory Committee on Immunization Practices guidelines ([MMR VACCINATION](#))**.

Adequate **VACCINATION** with the measles, mumps, and rubella (MMR) vaccine:

- **Children:** Two doses, at least 28 days apart, first dose given on or after 1st birthday (usually at ages 12–15 months, then 4–6 years)
- **Adults:** At least one dose for adults born during or after 1957 without evidence of immunity
- **College/university students:** Two doses, at least 28 days apart

Acceptable **PRESUMPTIVE EVIDENCE OF IMMUNITY** against measles includes at least one of the following:

- Written documentation of adequate vaccination (see below)
- Laboratory evidence of immunity (Measles IgG in serum positive; equivocal results should be considered negative).
- Laboratory confirmation of measles
- Birth before 1957

Providers are advised to be alert and consider measles in unimmunized person with rash illness and possible exposure to known measles case or traveled to region with measles outbreak.

Report to HDOH for potential measles infection who presents with:

- Fever $\geq 101^{\circ}\text{F}$
- Cough, coryza, and conjunctivitis
- Generalized maculopapular rash

Measles is transmitted by direct contact with infectious droplets or by airborne spread and is highly contagious. The virus can remain infectious in the air for up to two hours after an infected person leaves the area. Persons with measles are contagious from 4 days before through 4 days after rash onset.

If a person with suspected measles presents in your office:

- Airborne precautions should be used immediately with all suspect cases. Patients should be given a surgical mask to wear at all times and should be placed in a private negative air pressure room. If an airborne isolation room is not available, the patient should be placed in a private room with the door closed. Remind triage staff to identify and request assistance for patients with fever and a morbilliform and/or vesicular rash, or who report history of exposure to a person with measles.
- Immediately report the suspected case to HDOH.
- Specimen collection for laboratory confirmation of suspected measles cases:

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- Collect serum specimen as soon as possible upon suspicion of measles disease. Request testing for Measles IgM at a commercial laboratory.
- For [RT-PCR testing](#) at the State Laboratory Division (SLD):
 - Collect a throat or nasopharyngeal swab for RT-PCR (place synthetic swab in 1–3 mL of viral transport media (VTM) and keep cold at 4°C.
 - Collect urine samples >4 days after onset of symptoms.
 - If tested too early before rash onset, false negatives may occur.
 - DOCD approval is required prior to submission of specimens to the SLD.
- Ensure your patients and staff are protected against measles by confirming:
 - All patients without contraindications are age-appropriately vaccinated.
 - All staff have documented presumptive evidence of immunity to measles.
 - Two valid, documented doses of measles-containing vaccine
 - Laboratory evidence of immunity/confirmation of disease

Note: Healthcare workers without evidence of immunity must be excluded from day 5 after first exposure through day 21 following last exposure, ***regardless of receipt of post-exposure prophylaxis.***

Measles is an URGENT CATEGORY NOTIFIABLE CONDITION. Please report any suspected cases of measles. Do NOT wait for laboratory confirmation:

Oahu (Disease Reporting Line)(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) 600-3625
After hours on neighbor islands(800) 360-2575 (toll free)

We appreciate your assistance in protecting the health of Hawaii’s residents and visitors.

Sincerely,



Sarah K. Kemble, MD
State Epidemiologist