## Measles Update and Considerations for Transplant Safety

As of May 15, 2025

A total of <u>1024 confirmed measles cases have been reported across 31 U.S. jurisdictions</u>, with 14 documented outbreaks in 2025. Notably, 92% of confirmed cases are outbreak-related. The vast majority of cases (96%) have occurred in individuals who were either unvaccinated or had unknown vaccination status. Hospitalization was required in 13% of cases, and there have been three confirmed deaths from measles.

To date, no measles transmission through solid organ transplantation has been reported. However, given the increasing number of global and domestic cases, organ procurement organizations (OPOs) and transplant providers should maintain vigilance. Awareness of measles signs and symptoms, and assessment of potential exposure history, are critical to ensuring transplant safety.

## **Transmission and Clinical Presentation**

Measles is one of the <u>most contagious infectious diseases</u>, with approximately 90% of susceptible individuals developing infection after close contact. Transmission occurs through direct contact with respiratory droplets and airborne spread, with the virus infectious in the air for up to two hours after an infected individual has left the area.

Measles infection typically presents with a prodrome of fever, malaise, cough, coryza, conjunctivitis, Koplik spots (small blue-white spots) on the buccal mucosa, and is followed by the development of a maculopapular rash spreading from the head to the trunk and lower extremities. The rash generally appears approximately 14 days following exposure, and patients are considered to be contagious from four days before to four days after the rash appears.

Immunocompromised patients, including transplant recipients, may have atypical or mild symptoms and may lack a rash, but can experience prolonged viral shedding and a higher risk of complications..

## **Implications for Transplantation**

Measles infection can result in severe illness in transplant recipients, and no approved measlesspecific antiviral treatments are currently available.

To reduce the risk of transplant-transmitted measles, OPOs should consider:

- Evaluating deceased donors for potential measles infection, exposure history, and recent measles vaccination;
- Exercising caution with donors who have confirmed or suspected measles or known exposure; and
- Weighing risks based on measles pathogenesis, organ quality, and recipient vulnerability.

Maintaining transplant safety requires early recognition, careful screening, and infection control practices to protect patients, healthcare personnel, and their contacts.

The U.S. Centers for Disease Control and Prevention (CDC) have published resources related to <u>measles prevention</u>, as well as <u>infection prevention and control recommendations</u> for

measles in healthcare settings, and transplant centers are encouraged to consult these resources regularly.