

# MEASLES ALERT

## PATHOLOGY SOLUTIONS ARE IN OUR DNA



### **An outbreak of confirmed measles infection in Gauteng has been detected and confirmed by the NICD.**

Measles is a highly infectious viral infection with transmission occurring through airborne micro and large respiratory droplets. Measles is a notifiable medical condition. Outbreaks require rapid contact tracing and vaccination in order to prevent further transmission and to re-establish control.

While cases have not yet been detected outside of Gauteng, clinicians countrywide are urged to maintain a high index of clinical suspicion and request testing on all suspected cases. The following patient symptoms should alert clinicians to the possibility of measles:

- Prodrome of fatigue, myalgia and pyrexia starting a few days before the emergence of a macular-papular rash.
- Conjunctivitis and/or respiratory tract symptoms such as cough and/or coryza.

Complicated disease is most commonly found in young children under the age of 12 months, and in immunocompromised and malnourished children. Complications include bronchopneumonia, encephalitis, diarrhoea with dehydration, and severe sight-threatening keratoconjunctivitis.

The incubation period is 7-18 days. People with measles are infectious from one day prior to the appearance of the prodrome, until four days after the rash appears. Infected people should be isolated until 4 days after the appearance of the rash.

Should measles be suspected in a patient, please submit a blood specimen for measles IgM testing, as well as a throat swab, if possible. If the blood specimen is found to test positive for measles IgM, both the blood specimen and throat swab will be forwarded to the NICD for further investigation and to facilitate the control of the outbreak.

PEP regimen	Dosage and timing	Patient group
Measles/MMR vaccine (Live attenuated vaccine)	<p>One vaccine dose given IMI is most effective when administered within 72 hours of exposure</p> <p>Contraindicated in:</p> <ol style="list-style-type: none"> <li>1. Babies younger than 6 months of age</li> <li>2. Pregnancy</li> <li>3. Immunosuppressed patients (see below)</li> </ol>	<p>Healthy, immunocompetent people older than 6 months of age and HIV Infected people provided that:</p> <ul style="list-style-type: none"> <li>• 6 months to 5 years of age: CD4 percentage &gt; 15%</li> <li>• Older than 5 years of age: CD4 count &gt; 200/<math>\mu</math>L</li> </ul>
Normal Human Immunoglobulin (NHIG)	0.5mL/kg body weight, IMI up to a maximum dosage of 15mL within 6 days of exposure	<ul style="list-style-type: none"> <li>• People with primary immunodeficiencies</li> <li>• Babies younger than 6 months of age</li> <li>• People with haematological malignancies</li> <li>• People who have had stem cell transplants</li> <li>• People on systemic immunosuppressive medication including corticosteroids at a dose of 2mg/kg body weight or more, or 20mg/day of prednisone equivalent for 2 weeks or more</li> <li>• People who have had anaphylactic reactions to previous measles containing vaccine, neomycin or gelatine</li> <li>• HIV infected children younger than 5 years of age with a CD4 percentage &lt; 15%, or older than 5 years of age with CD4 count &lt; 200/<math>\mu</math>L</li> <li>• Pregnant women</li> </ul>

The use of live attenuated vaccines carries a theoretical risk to the foetus during pregnancy. Pregnant women are at higher risk of complicated disease should they become infected with measles virus, and there is a risk of foetal loss, premature delivery and severe post-natal infection in the babies born to infected women. The recommendation is therefore that NHIG should be offered to pregnant women who have been exposed to measles, and in whom there is no evidence of prior immunity to measles virus.

Contact your local Ampath representative should you have any further queries regarding the requirements for measles testing and reporting.