

EPI ALERT

FEBRUARY 14, 2018

MEASLES

VOLUME 1

The Ministry of Health through Pan American Health Organization (PAHO) have been informed that countries of the European region reported 17,584 measles cases between November 2016 and December 2017. Additionally, PAHO has issued alerts regarding cases of Measles in the Region of the Americas. Between January 2017 and January 2018 there were six (6) countries in the Region of the Americas that have reported confirmed measles cases: Antigua and Barbuda; Argentina; Canada; Guatemala; USA and Venezuela. Most recent reports relate to imported cases.

The first of two index cases travelled to Europe from Guatemala and exhibited symptoms on return (16 January 2018) and seen at a healthcare facility (18 January 2018). The local health authorities were notified the same day and the necessary investigation and control activities were initiated. The second case was a European citizen who travelled to Antigua & Barbuda while in the infectious prodromal phase, i.e. other flight passengers were exposed. Other individuals continued to other Caribbean Islands on yachts and/or private charter vessels.

Although the Region of the Americas was the first to be declared by the International Expert Committee (IEC) free of rubella in 2015 and measles in 2016, WHO/PAHO advises that residents of the Americas travelling to other regions of the world be immunized against measles and rubella prior to departing as the virus is still circulating in other regions of the world. Additionally, **all healthcare workers, front line tourist workers, and children <10yrs of age** receive/have received two doses of MMR.

It is therefore recommended that countries increase their vigilance of suspected cases of measles, bearing in mind that this is peak tourist season. Also recall that persons are infectious during the prodromal phase, when the **3 C's** are present: **cough, coryza, conjunctivitis**. Specifically, persons are infectious four days before and after the onset of rash. **Immunocompromised persons might not develop a rash.**

Measles is spread by droplet and contact (fomite). Initial signs and symptoms typically include fever, cough, coryza, and conjunctivitis. Within 2-3 days of the start of symptoms, Koplik spots may be noted. Within 3-5 days of the start of symptoms, a flat erythematous rash is seen, with cephalocaudal spread. Symptoms develop 10-12 days after exposure to an infected person and can last 7-10 days. Complications occur in about 30% of cases and may include otitis media, acute encephalitis, diarrhea, subacute sclerosing panencephalitis and pneumonia (rare and late onset), among others.

(Please see attached diagram *How to Recognize Measles*)

CASE DEFINITION

A suspected case of measles may present as follows:

- Acute onset of fever, $>38^{\circ}\text{C}$ or $>100^{\circ}\text{F}$,
- Erythematous maculopapular rash, starting on the face and spreading to trunk and extremities,
- Koplik spots, small white spots in the mouth,
- Coryza, and
- Conjunctivitis.

If you encounter a suspected case:

- Inform Surveillance Unit immediately:
 - **M-F 9am-5pm:** 502-4790, 502-4776, 397-1021; **After hours:** 376-4705, 376-4790, 376-3970, 376-1103 (**New Providence**);
 - 350-6700 ext 2353, 359-4541 (**Grand Bahama**)
- Obtain a **nasopharyngeal swab**, **urine sample**, and **blood sample** (red top) and *request Measles IgM*
- Complete Measles Case Investigation and Lab Forms

PREVENTION AND CONTROL

- Vaccination is the best preventive measure, i.e. two doses of MMR prior to age 6yrs
- Proper respiratory hygiene, i.e. covering coughs and sneezes; using tissues to cover coughs and sneezes and wipe noses (dispose properly after single use)
- Frequent hand washing with soap and water
- In the primary care setting, isolate infected clients to reduce transmission
- Infected persons should remain home and avoid contact with immunocompromised persons
- Treat symptomatically, **NO ASPIRIN FOR FEVER REDUCTION**

Specimens should be sent to PMH Lab within 48hrs of sampling for referral to CARPHA along with properly completed Measles Case Investigation Form and CARPHA Laboratory Forms

How to recognize measles

The U.S. measles vaccine program has reduced cases from millions in the 1950s and 1960s to a low of 37 in 2004. The disease is making a bit of a comeback, however, and parents and even doctors do not always recognize the symptoms.

COMPLICATIONS

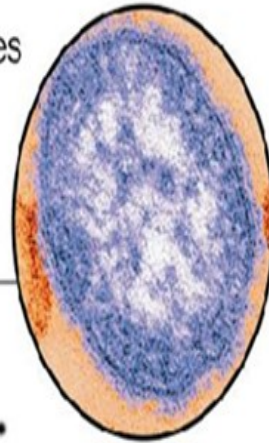
Encephalitis, a brain swelling that can leave children deaf or mentally impaired. For every thousand U.S. children who get measles, one or two will die from it.

Ear infection

Pneumonia

Diarrhea

Measles virus



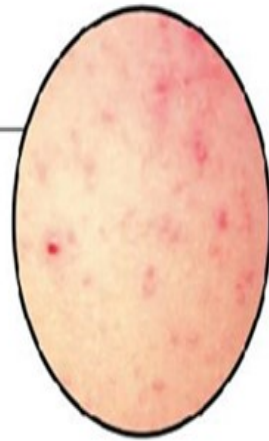
INFECTION

Measles, also called rubeola, invades cells that line the back of the throat and the lungs. It is highly contagious and **spreads through the air**, and it is particularly dangerous for babies and young children.

SYMPTOMS

The first symptom is a high fever. Next comes runny nose, cough and red eyes. Finally a **rash of tiny red spots** begins at the head and travels down the body, but the disease is contagious well before the rash begins.

Skin rash



Source: Centers for Disease Control and Prevention

BONNIE BERKOWITZ AND ALBERTO CUADRA
— THE WASHINGTON POST