

# About Measles

- **Measles is a serious respiratory infection caused by a virus**
- Symptoms include:
  - High fever
  - Coughing
  - Aches and pains
  - Red eyes
  - Runny nose
  - Rash
- Complications include:
  - Ear infections
  - Deafness
  - Pneumonia
  - Impact to the immune system – having to re-learn how to fight bacteria and viruses
  - Swelling of the brain, often resulting in permanent brain damage, in 1 in 1000 people
  - Lung and neurologic problems in 3 in 1000 people
  - Degenerative nervous system disease 7 to 10 years following infection
  - Death
- Measles **spreads very easily** through coughing and sneezing
  - 9 out of 10 people who meet someone with measles will become infected
  - The measles virus can stay in the air for 2 hours
- **Measles is preventable through vaccination (MMR or MMRV)**
  - Two doses of the MMR vaccine are ~97% effective at preventing measles
  - One dose of the MMR vaccine is ~93% effective
  - **MMR and MMRV vaccines are safe and effective**
  - Vaccination schedule – Ontario, Canada  
[[Travelling internationally](#) | [Not Travelling](#)]
- For individuals who are **immune compromised**:
  - **Four studies confirmed the safety of the MMR vaccine for individuals with 22q11.2DS.**
  - Please consider consulting with your healthcare provider if you or your child has not been vaccinated against measles

## For additional information about measles please visit:

- Infection Prevention and Control Canada (IPAC) – [Measles Resources](#)
- Canadian Paediatric Society (CPS) – [Measles](#)

## Research reports about the MMR vaccines and 22q11.2DS:

### [Vacinas Vivas em Crianças com Síndrome de DiGeorge/ Deleção 22q11.2](#)

(Portuguese)

[Live Vaccine in Children with DiGeorge/22q11.2 Deletion Syndrome].

Miranda M, Martins AT, Carvalho S, Serra-Caetano A, Esteves I, Marques JG. Acta Med Port. 2019 Aug 1;32(7-8):514-519. doi: 10.20344/amp.9802.

### [Live vaccine use and safety in DiGeorge syndrome.](#)

Hofstetter AM, Jakob K, Klein NP, Dekker CL, Edwards KM, Halsey NA, Baxter R, Williams SE, Graham PL 3rd, LaRussa P. Pediatrics. 2014 Apr;133(4):e946-54. doi: 10.1542/peds.2013-0831.

### [Live viral vaccines in patients with partial DiGeorge syndrome: clinical experience and cellular immunity.](#)

Moylett EH, Wasan AN, Noroski LM, Shearer WT. Clin Immunol. 2004;112(1):106-112. doi: 10.1016/j.clim.2004.02.008

### [Safety of live viral vaccines in patients with chromosome 22q11.2 deletion syndrome \(DiGeorge syndrome/velocardiofacial syndrome\).](#)

Perez EE, Bokszczanin A, McDonald-McGinn D, Zackai EH, Sullivan KE. Pediatrics. 2003 Oct;112(4):e325. doi: 10.1542/peds.112.4.e325.