

## Measles Immunization Recommendations

**Attention:** All Physicians, Walk-In Clinics, Emergency Departments, Infection Control Practitioners, Occupational Health Practitioners, Family Health Teams, Nurse Practitioners, NSM LHIN, Central LHIN, Midwives, Long-Term Care Homes, Retirement Homes

**Date:** April 15, 2014

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Given the increasing number of measles cases in Ontario and elsewhere, these are the following measles immunization recommendations. Please ensure your patients are up to date with their measles immunizations.

### General immunization recommendations

- **Everyone born in 1970 or after is recommended to have two measles immunizations at least four weeks apart, with the first one given at one year of age at the earliest.**
- **Adults born before 1970 are assumed to be immune due to previous infection. If desired, one MMR can be given to increase assurance of immunity.**
- **Health care workers and military personnel, regardless of when they were born are recommended to have two measles immunizations or proof of immunity.**
- **Measles immunization is not recommended for immunocompromised patients or pregnant women**

### Routine childhood measles immunization

- Continue to follow the Ontario immunization schedule: Measles-Mumps-Rubella (MMR) at 12 months of age and then Measles-Mumps-Rubella-Varicella (MMRV) between four and six years of age.

### Travelers

- Ensure travelers born 1970 or later receive two measles immunizations. If born before 1970, one dose is recommended.
- Infants may receive MMR immunization as early as six months of age prior to travel. The two dose series must then be restarted on or after the first birthday (total of three doses).
- For more information on where measles is occurring, see the Public Health Agency of Canada's "Global Measles Update": <http://www.phac-aspc.gc.ca/tmp-pmv/notices-avis/notices-avis-eng.php?id=98>

### Minimum interval between measles immunizations

- Between two MMR immunizations is 4 weeks
- Between the first MMR and then MMRV is six weeks.
- Between two MMRVs is six weeks, but preferably three months.

### Measles immunization effectiveness

- A single dose of measles-containing immunization is 85 to 95% effective
- Two doses in children provides close to 100% effectiveness.
- Herd immunity is developed when the measles immunization coverage is at least 95%. The coverage in Simcoe-Muskoka is estimated to be about 90%.

### Potential side effects of non-immunization in children who subsequently become infected with measles.

- Otitis media or diarrhea can occur in 1/10
- Pneumonia can occur in 1/20
- Encephalitis can occur in 1 /1,000
- Death can occur in 1-2/1000
- Increased risk in pregnant woman for miscarriage, premature labour and low birth-weight baby.
- In 2012, there were 122,000 measles deaths globally. In 1980, before widespread vaccination, measles caused an estimated 2.6 million deaths each year.

For further information on immunization-related issues, please contact the Health Unit at 705-721-7520 ext. 8806