Winnipeg Regional Health Authority | Office régional de la santé de Winnipeg
Caring for Health | À l'écoute de notre santé

Immune Globulin Information Sheet for Prevention of Measles

What is measles?

Measles (red measles) is a highly contagious infection that is caused by the measles virus. It spreads easily from person to person. Measles occurs throughout the world and remains a serious and common disease. Canada is seeing an increase in measles activity compared to 2023. Measles infection can lead to complications, including ear infections, pneumonia (lung infection) and encephalitis (brain inflammation) that can lead to seizures, brain damage or death. Measles occurring during pregnancy has been associated with spontaneous abortion, premature delivery and babies born with low birth weight.

How is measles spread?

Measles is spread from the infected person to others through the air or through contact with fluids in the nose or throat by coughing, sneezing, or by sharing food or drinks.

What are the symptoms of measles?

Symptoms of measles include:

- fever
- cough
- runny nose
- red eyes
- red, blotchy rash often appears after the initial symptoms start (most often begins on the face and spreads down the body
- Koplik spots (small white spots may also develop on the inside of the mouth or throat)

How can measles be prevented?

Measles-containing vaccine can protect children and adults from measles disease. In Canada measles vaccine is available in combination with mumps and rubella (MMR) or mumps, rubella and varicella (MMRV). In some countries measles vaccine is given alone.

What is immune globulin?

Immune Globulin (Ig) is a sterilized blood product prepared from human blood plasma which contains concentrated amounts of IgG antibodies and small amounts of IgA and IgM antibodies. Antibodies are substances created in the blood to fight infections. Ig is given to a person that may have been exposed to measles virus to help them fight off this infection. The person will have immediate protection, but this lasts only a short time. Ig should be given as soon as possible after an exposure to be most effective.

Is immune globulin safe?

Immune globulin is among the safest blood products available. Canadian Blood Services carefully screens donors and tests all blood plasma collected. In addition, donated plasma undergoes multiple purification procedures for human virus inactivation or removal during preparation of Ig products. Ig does not contain any preservatives.

Who *should* get immune globulin?
Immune globulin is used to prevent or reduce the severity of measles disease.
Ig may be recommended for the prevention of measles disease for people who may have been exposed to measles but do not have protection and:

- are less than 1 year of age, or
- are pregnant, or
- are immunocompromised, or
- are not able to safely receive measles vaccine

Talk to your public health nurse or health care provider for more information.

Who should *not* have immune globulin?
Immune globulin should not be given to anyone who has:

- a history of severe allergic reaction (anaphylaxis) to an immune globulin or any of its components
- had an unusually severe reaction to an immune globulin in the past
- any disorder that would contraindicate intramuscular injection (i.e., severe thrombocytopenia)
- an isolated IgA deficiency

People, who have received a live vaccine (e.g., measles, mumps, rubella or varicella containing vaccine) in the 14 days before receiving Ig, may need to have this vaccine dose repeated. Those who receive Ig should postpone receiving measles, mumps, rubella or varicella containing vaccine for up to **6 months** or longer, after receiving Ig because Ig may interfere with the development of antibodies to these specific live vaccines.

Talk to your public health nurse or health care provider for more information.

What are the possible side effects to immune globulin?
Most people have no reactions to the product. Reactions that do occur are typically mild.
Possible reactions include:

- swelling, redness or pain at the injection site
- feeling unwell
- fever
- itchiness

As with any injection, unexpected or unusual side effects can occur. This includes severe allergic reaction (anaphylaxis).

What should you do if you have a reaction to immune globulin?

- apply a cool wet cloth where the needle was given to reduce the pain and swelling
- take a medication such as acetaminophen (e.g. Tylenol®) to reduce the pain
- Aspirin® (ASA) is not recommended for individuals younger than 18 years of age
- report any unusual reactions to your local Public Health Nurse or Health care provider

References: MB Health Measles factsheet (2024), AB Health Services Ig Info sheet for Prevention of Measles (2014) & Immunization Program (2022), and Immunize BC (2024)