Rabies Vaccine

What is rabies?
- A virus that can infect the nervous system of any mammal.
- The rabies virus is found in the saliva of a rabid animal; it is spread through a bite or scratch, or (rarely) through the air if visiting a cave where many bats roost.
- Rabies can cause neurological symptoms and coma.
- Nearly all people with rabies will die.

What does rabies vaccine contain?
- **RabAvert®** Rabies vaccine contains polygeline (processed bovine gelatin), human serum albumin, potassium glutamate, sodium EDTA, chicken protein, neomycin, chlortetracycline, ovalbumin, amphotericin B, B propiolactone, bovine serum.
- **Imovax®** vaccine contains beta propiolactone, neomycin, phenol red indicator and human albumin. It is harvested from infected MRC-5 human diploid cells.
- These vaccines do not contain latex or preservatives.

Who should receive rabies vaccine?
- People with actual exposure or possible risk of exposure to rabid animals, (e.g. lab workers, veterinarians, animal control and wildlife workers and spelunkers).
- Travellers to rabies-infected countries who are away from a major medical centre, or who stay longer than one month or who stay for any period of time when their activities pose a special risk.

Who should not receive rabies vaccine?
- Pre-exposure:
  - Anyone who has had a life-threatening allergic reaction to any component of the vaccine
  - People with moderate to severe illness may have to delay immunization.
- Post-exposure: no specific contraindications.

When should rabies vaccine be given?
- A series of 3 injections given on day 0, 7 and 21 to 28 (pre-exposure).
- A series of 4 injections on day 0, 3, 7 and 14 (post-exposure).
- Persons previously immunized with a completed rabies vaccine schedule need to receive 2 additional doses on day 0 and 3 (post exposure).
- May be safely given with other vaccines.

How is rabies vaccine given?
- By injection into a muscle.

How effective is rabies vaccine?
- Antibodies appear in most persons 7 to 14 days after immunization and persist for at least 2 years.
- Antibodies should be tested 14 days after final dose, if post-exposure and are immunosuppressed or on immunosuppressive therapy.
How long does the protection last?

- At least 2 years.
- Have a blood test done every 2 years if risk of exposure to rabies continues (eg. Veterinarians); every 6 months if a lab worker.
- Travelers who have completed a 3-dose pre-exposure rabies series or have received a full post-exposure series are considered pre-exposure immunized and do not require routine boosters. Periodic blood testing for rabies antibody is not necessary in most international travelers. (CDC, 2016)
- Rabies vaccine induces long-lasting memory cells, giving rise to an immune response when a booster dose of vaccine is administered. Periodic booster injections are not recommended for travelers. If exposed to unknown or suspected rabid animal, immunized travelers should receive 2 booster doses of vaccine, given intra-muscularly; the 1st the day of exposure and the 2nd – 3 days later, along with thorough wound treatment. (WHO, 2016)

What might be felt after receiving rabies vaccine?

Common (> 1%)

- Redness, hardness, pain at the injection site
- Fatigue, fever, headache, muscle aches, joint soreness, dizziness, swollen lymph nodes, nausea, diarrhea, abdominal pain, rash or pain/swelling in joints.

Very Rare (<0.01%)

- Allergic symptoms (rash, hives, wheezing, anaphylaxis).
- Neurological (numbness, encephalitis, transient paralysis or Guillain-Barré syndrome)
- Palpitations, visual disturbance, chills, sweating, vertigo.

Call the number below if you have severe or unusual reactions.

Individual immunization information is recorded in an electronic provincial immunization registry database. Recorded information may be used to:

- Manage immunization records
- Notify you if you or your child needs an immunization
- Monitor how well vaccines work in preventing vaccine preventable diseases.

Your immunization records may also be shared with health care professionals in order to provide public health services, assist with diagnosis and treatment; and to control the spread of vaccine preventable diseases.

For more information call Population and Public Health at:

| Pre-exposure: | 306-655-4780 |
| Post-exposure: | 306-655-4612 |