

Date: 11 July 2017

To: South Zone Physicians, Midwives, Pharmacies

From: Medical Officers of Health – South Zone

RE: UPDATE # 3: PERTUSSIS Outbreak in South Zone (EI # 2017-313)

UPDATE on the pertussis outbreak declared in South Zone on June 5:

- As of July 7: 154 confirmed cases in south zone this year, of which 129 were linked to the current outbreak.
- Of the 129 cases, 95 were unimmunized, 7 were partially immunized and 24 were up to date for age (3 unknown). The dropping proportion of unimmunized cases (previously >80% were unimmunized, now 74% are unimmunized) indicates impact on nearby immunizing communities.
- Outbreak cases reported in Fort Macleod, Coaldale, Lethbridge, Cardston and communities within the County of Lethbridge.
- A cluster of cases in Medicine Hat area are not currently epidemiologically linked to the current outbreak.
- Pertussis is under-reported, especially given the atypical symptoms in older children, adults and immunized individuals.
- Case data is updated each Thursday on the AHS website www.albertahealthservices.ca/pertussis. Please refer your patients to that page for valuable information on pertussis.

See updated information below on Management of Contacts.

Lab confirmation: Consider testing by nasopharyngeal swab:

- If your patient has had contact with a confirmed case.
- If your patient has repetitive coughing spells beyond 6 days of symptom onset.
- Up to a maximum of 21 days after symptom onset to minimize false negatives.
- There is no need to swab multiple cases within a single family unit, as they all likely have the same infection.

**Use Regan-Lowe transport media and label with EI # 2017-313 on
ProvLab requisition.**

Management of Case:

- Antibiotics for confirmed cases (*see page 3*)
 - ❖ Treatment eradicates *B. pertussis* from the nasopharynx, but has minimal effect on clinical symptoms or course of pertussis illness unless given in the early stages of infection (incubation period, catarrhal or early paroxysmal stages).
- All cases are required to stay home and not expose new people **for 5 days** after start of antibiotic therapy.
- If there is no treatment or treatment is incomplete, the case should be excluded:
 - ❖ for 21 days from onset of paroxysmal, or
 - ❖ until the end of the cough, whichever comes first.

Management of Contacts:

- Public Health will follow up all contacts of a confirmed Pertussis case to offer post exposure prophylaxis (PEP) to protect “vulnerable persons” (women in third trimester of pregnancy and infants <1 year of age).
- ***ALL contacts of a case that share living space with a vulnerable person should receive PEP to protect the vulnerable person. Please contact public health with ANY questions if you identify a case or contact in a household where there is an infant <1 year old or a pregnant woman in her third trimester.***
- **Generally, it is NOT recommended to use antibiotic prophylaxis for household contacts other than in the circumstances listed above as individuals may be repeatedly exposed during this outbreak.**

Prevention:

- Immunization as per Alberta immunization schedule for children and adults.
- Take the opportunity to review dTap eligibility when tetanus immunization indicated.
- One dose of pertussis containing vaccine for pregnant women in third trimester.
- Early diagnosis and treatment to prevent spread to others.

We also stress the importance of vaccination for yourselves and your staff. Please make sure your staff is up to date on their pertussis vaccinations.

References:

Alberta Notifiable Disease Guidelines at: <https://open.alberta.ca/publications/pertussis>

Recommended Antibiotics ⁽⁹⁾		
Antibiotic	Dosage	Comments
Azithromycin	<p><u>Children:</u> <i>Day 1:</i> 10 mg/kg/day once daily po to a maximum of 500 mg/day. <i>Day 2-5:</i> 5mg/kg/day one daily po to a maximum of 250 mg/day. <i>Total:</i> 5 days</p> <p><u>Adults:</u> <i>Day 1:</i> 500 mg once daily po <i>Day 2:</i> 250 mg once daily po <i>Total:</i> 5 days</p>	First line
Clarithromycin	<p><u>Children:</u> 15 mg/kg/day divided into 2 doses po x 7 days to a maximum of 1000 mg/day</p> <p><u>Adults:</u> 250-500 mg bid po x 7 days</p>	Second Line Not recommended in pregnancy
Erythromycin (estolate preferred)	<p><u>Estolate (Children):</u> 40mg/kg/day divided into 3 doses po x 7 days to a maximum of 1000 mg/day</p> <p><u>Base (Adults):</u> 250-500 mg po QID x 7 days to a maximum of 2000 mg/day</p>	Third Line Estolate (liquid) is contraindicated in persons with pre-existing liver disease or dysfunction and in pregnancy (particularly in the first three months) except where no alternative therapy is appropriate.
Trimethoprim-Sulfamethoxazole (TMP-SMX)	<p><u>Children:</u> 8 mg/kg/day (TMP) and 40 mg/kg/day (SMX) divided into 2 doses po x 10 days to a maximum of:</p> <ul style="list-style-type: none"> • 4-6mg/kg (TMP) and 20-30 mg/kg (SMX) q12h for children over 2 months of age and up to 40 kg; • 160 mg (TMP) and 800 mg (SMX) q12h for children over 2 months of age and 40 kg and over <p><u>Adults:</u> 320 mg/day (TMP) and 1600 mg/day (SMX) divided into 2 doses x 10 days</p>	Alternate – used only if above drugs are contraindicated. Cannot be used for children under the age of 2 months, in pregnancy or during lactation

If you have any questions, or require further information, please contact the Medical Officer of Health on call at (403) 388-6111.