



OCT. 30, 2006

HEALTH ALERT

*****This is only an EXERCISE*****

Lignite Wind Exercise – Health Alert Message #3

The events being reported are not real. Do not respond to this message.

Since October 24, a total of 217 patients – with 178 requiring hospitalization due to severe respiratory illness – have been reported to the North Dakota Department of Health. These patients report sudden onset of symptoms that include fever, chest pain, cough, headache, weakness and difficult breathing. Thirty patients have died. Age ranges from less than 10 years to over 65 years. Investigation data reveals many cases have traveled to the Garrison Dam Visitor Center. It also indicates that family members of these patients are also becoming ill with similar symptoms.

Laboratory results on initial patients have confirmed pneumonic plague. The first signs of illness from pneumonic plague are fever, headache, weakness and cough productive of bloody or watery sputum. The pneumonia progresses over two to four days and may cause septic shock and, without early treatment, death.

There is no currently approved, US-licensed vaccine available for pneumonic plague. The NDDoH is recommending that people exhibiting clinical symptoms of pneumonic plague be treated with the following therapy. Also, listed in the table on the following page is postexposure prophylaxis recommendations for close contacts of symptomatic cases.

Patient Category Recommended Therapy
Contained Casualty Setting
<p>Adults Preferred choices</p> <ul style="list-style-type: none"> Streptomycin, 1 g IM twice daily Gentamicin, 5 mg/kg IM or IV once daily or 2 mg/kg loading dose followed by 1.7 mg/kg IM or IV 3 times daily† <p>Alternative choices</p> <ul style="list-style-type: none"> Doxycycline, 100 mg IV twice daily or 200 mg IV once daily Ciprofloxacin, 400 mg IV twice daily‡ Chloramphenicol, 25 mg/kg IV 4 times daily§
<p>Children Preferred choices</p> <ul style="list-style-type: none"> Streptomycin, 15 mg/kg IM twice daily (maximum daily dose, 2 g) Gentamicin, 2.5 mg/kg IM or IV 3 times daily† <p>Alternative choices</p> <ul style="list-style-type: none"> Doxycycline, If >45 kg, give adult dosage

<p>If ,45 kg, give 2.2 mg/kg IV twice daily (maximum, 200 mg/d) Ciprofloxacin, 15 mg/kg IV twice daily† Chloramphenicol, 25 mg/kg IV 4 times daily§</p>
<p>Pregnant women Preferred choice Gentamicin, 5 mg/kg IM or IV once daily or 2 mg/kg loading dose followed by 1.7 mg/kg IM or IV 3 times daily† Alternative choices Doxycycline, 100 mg IV twice daily or 200 mg IV once daily Ciprofloxacin, 400 mg IV twice daily‡</p>
<p>Mass Casualty Setting and Postexposure Prophylaxis#</p>
<p>Adults Preferred choices Doxycycline, 100 mg orally twice daily†† Ciprofloxacin, 500 mg orally twice daily‡ Alternative choice Chloramphenicol, 25 mg/kg orally 4 times daily§**</p>
<p>Children\ Preferred choice Doxycycline,†† If >45 kg, give adult dosage If ,45 kg, then give 2.2 mg/kg orally twice daily Ciprofloxacin, 20 mg/kg orally twice daily Alternative choices Chloramphenicol, 25 mg/kg orally 4 times daily§**</p> <p>Pregnant women¶ Preferred choices Doxycycline, 100 mg orally twice daily†† Ciprofloxacin, 500 mg orally twice daily Alternative choices Chloramphenicol, 25 mg/kg orally 4 times daily§**</p>

*These are consensus recommendations of the Working Group on Civilian Biodefense and are not necessarily approved by the Food and Drug Administration. See "Therapy" section for explanations. One antimicrobial agent should be selected. Therapy should be continued for 10 days. Oral therapy should be substituted when patient's condition improves. IM indicates intramuscularly; IV, intravenously.

†Aminoglycosides must be adjusted according to renal function. Evidence suggests that gentamicin, 5 mg/kg IM or IV once daily, would be efficacious in children, although this is not yet widely accepted in clinical practice. Neonates up to 1 week of age and premature infants should receive gentamicin, 2.5 mg/kg IV twice daily.

‡Other fluoroquinolones can be substituted at doses appropriate for age. Ciprofloxacin dosage should not exceed 1 g/d in children.

§Concentration should be maintained between 5 and 20 µg/mL. Concentrations greater than 25 µg/mL can cause reversible bone marrow suppression.^{35,62}

\Refer to "Management of Special Groups" for details. In children, ciprofloxacin dose should not exceed 1 g/d, chloramphenicol should not exceed 4 g/d. Children younger than 2 years should not receive chloramphenicol.

¶Refer to "Management of Special Groups" for details and for discussion of breastfeeding women. In neonates, gentamicin loading dose of 4 mg/kg should be given initially.⁶³

#Duration of treatment of plague in mass casualty setting is 10 days. Duration of postexposure prophylaxis to prevent plague infection is 7 days.

**Children younger than 2 years should not receive chloramphenicol. Oral formulation available only outside the United States.

††Tetracycline could be substituted for doxycycline.

Infection control measures include:

A patient should remain isolated during the first 48 hours of antibiotic therapy and until clinical improvement occurs. Standard respiratory droplet precautions (gown, gloves, and eye protection) should be used.

If large numbers of patients make individual isolation impossible, patients with pneumonic plague may be cohorted while undergoing antibiotic therapy. Patients being transported should

wear surgical masks. Hospital rooms of patients with pneumonic plague should receive terminal cleaning in a manner consistent with standard precautions, and clothing or linens contaminated with body fluids of patients infected with plague should be disinfected as per hospital protocol.

A person considered to be close contact to a confirmed case that refuses to receive prophylaxis should be carefully watched for the development of fever or cough during the first 7 days after exposure and treated immediately should either occur. Isolation of close contacts refusing antibiotic prophylaxis is not recommended.

In addition to beginning antibiotic prophylaxis, people living or working in close contact with patients with confirmed or suspect pneumonic plague that have had less than 48 hours of antimicrobial treatment should follow respiratory droplet precautions and wear a surgical mask. Avoid unnecessary close contact with patients with pneumonic plague until at least 48 hours of antibiotic therapy and clinical improvement has taken place.

Providers should call 800.472.2180 or 701.328.2378 to report suspected cases.

*****This is only an EXERCISE***
Please do not respond to this message.**

Categories of Health Alert messages:

- *Health Alert conveys the highest level of importance; warrants immediate action or attention.*
- *Health Advisory provides important information for a specific incident or situation; may not require immediate action.*
- *Health Update provides updated information regarding an incident or situation; no immediate action necessary.*
- *Health Information provides general information that is not necessarily considered to be of an emergent nature.*

This message is being sent to local public health units, clinics, hospitals, physicians, first responders, tribal health, North Dakota Nurses Association, North Dakota Long Term Care Association, North Dakota Healthcare Association, North Dakota Medical Association, North Dakota EMS Association and hospital public information officers.