



Bulletin No. 22
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Tetanus at Mt. Edgecumbe

In July of this year, a Mexican/American sailor died of tetanus at the PHS Hospital in Mt. Edgecumbe. The sailor's address was in Sitka and although he had been known to travel to southern California and Mexico, there had been no recent out-of-state travel. Eight days prior to admission, he injured the fingernail of his right fifth finger while working upon a fishing vessel. Two days prior to admission difficulty swallowing and in opening his mouth developed. He presented with these complaints and with muscle spasms of the back and neck. The diagnosis of tetanus was suspected and penicillin plus 6000 U of human tetanus immune globulin were administered. Over the next three days intermittent tonic spasms and trismus worsened. The spasms subsequently could be initiated by tactile or auditory stimuli. The morning of the fourth hospital day, laryngospasm occurred suddenly and led to his eventual death. A culture of the wound on admission grew *E. coli* and *Clostridium tetani* (confirmed at CDC, Atlanta). His immunization status was unknown, but it appeared he had received only one or possibly two tetanus immunizations as a child and none since.

This is the first case of tetanus known to have occurred in Alaska. We are uncertain why this should be. However, it is known that while spores of *Clostridium tetani* are widespread in the soils of Alaska, spores of *Cl. tetani* seem to be rare. The Communicable Disease Control Section is continuing its investigation of this case to attempt to identify where the organism or its spores were acquired. A plausible explanation would be that the sailor contaminated the wound with bacteria from his own G.I. tract since up to 40% of humans have *Cl. tetani* in fecal specimens.

This office would be interested in knowing further information regarding human or animal tetanus, and/or *Cl. tetani* isolations from soil or environmental samples in Alaska. If you are aware of such information, give us a call or drop us a line.

Incidentally, the average annual incidence of tetanus and the case-fatality ratio for tetanus climb progressively after age 15 years, probably reflecting waning immunity and failure of adults to maintain adequate immunization status. Remember, tetanus and diphtheria immunization (TD) is recommended every 10 years following the primary DPT series.

INFLUENZA

Outbreaks of influenza due to the A/USSR influenza virus have occurred in the United States recently in several in the northwestern states. Although there have been no influenza isolates from Alaska this season, we expect positive influenza cultures to begin to appear shortly after the holidays.

Health care personnel are encouraged to submit throat swabs for viral culture. In influenza, specimens should be obtained within 16 hours of onset of symptoms. Viral transport media and the accompanying report forms are available from this office or the Virology/Rabies Unit, Arctic Health Research Building, U of A, Fairbanks, Alaska 99701.