# Update on the outbreak of cholera affecting Pohnpei State in the Federated States of Micronesia

*Adapted from a report forwarded from the Pacific Public Health Surveillance Network*[1]

The outbreak was first recognised on 17 April 2000. As of 26 June 1,596 cases of watery diarrhoea have been reported – a figure based on inpatient and outpatient records from the Pohnpei Hospital together with data provided by community-based dispensaries. Nine deaths have been associated with the outbreak. *Vibrio cholerae* has been isolated by the Pohnpei Hospital and confirmed as the Ogawa serotype. Of these suspected cholera cases, 954 meet the World Health Organization case definition for cholera.[2] The epidemic is consistent with an initial point-source outbreak at a large funeral at Kitti, followed by a mixture of person-to-person transmission and additional point source outbreaks in a clockwise direction around the island.

Up to 27 June 2000, 368 (92%) of the 399 admissions to hospital, and 625 (80%) of 777 outpatient and emergency department presentations with acute watery diarrhoea, met the WHO case definition for cholera. Of the hospitalised cases, 40% were male, with adults more commonly infected. There appeared to be a bimodal distribution, with highest rates in males in the 65-74 year age group, and in females 20-24 years or over 75 years old.

Of the 777 non-hospitalised suspected cholera patients, 50% were male and 119 were less than five years of age. Due to possible multiple outpatient visits by the same patient, together with recording and data entry errors, the figures for non-hospitalised cases need to be treated with caution.

1. Information provided by the Federated States of Micronesia Department of Health via the Pacific Public Health Surveillance Network, 30 June 2000.
2. For surveillance purposes, in an epidemic situation, the case definition for suspected cholera is aperson five years of age or greater developing acute watery diarrhoea.

# Overseas briefs

***Source: World Health Organization (WHO)***
***This material has been summarised from information on the WHO Internet site. A link to this site can be found under 'Other Australian and international communicable diseases sites' on the CDI homepage.***

## *Accidental exposure to smallpox vaccine in the Russian Federation*

The recent report of illness amongst eight young children in Vladivostock who had played with discarded ampoules of smallpox vaccine, has now been confirmed by the Ministry of Health of the Russian Federation. Laboratory confirmation of the illness in the children is being sought. The report has evoked much public concern. In some of the reports, there were misconceptions about the components of the vaccine used to prevent smallpox, and about why any country might still be retaining stocks of smallpox vaccine. This note aims to clarify these issues.

**1) Smallpox vaccine is not made from smallpox virus.**

The vaccine which was used for centuries to vaccinate against smallpox was not made from smallpox, but from vaccinia virus. Vaccinia is a different virus from the virus that causes smallpox. However, it is a member of the same family of viruses to which the smallpox virus belongs. The smallpox virus is also known as variola virus. Mass vaccinations with smallpox vaccine made from vaccinia virus led to the eradication of smallpox announced by WHO in 1980. People vaccinated with smallpox vaccine (vaccinia) develop reactions to it which range from mild and transient to severe and, very rarely, fatal.

**2) Two countries still keep smallpox virus (variola) stocks.**

Although smallpox disease has been eradicated, two laboratories still hold stocks of smallpox virus (variola). These are the WHO Collaborating Centres in Atlanta (USA) and Koltsovo (Russian Federation).

**3) Many countries still hold smallpox vaccine (vaccinia) stocks.**

WHO recommends that countries which still have stocks of smallpox vaccine (vaccinia) maintain these stocks. This recommendation has been made for two reasons. Firstly, small amounts of vaccine are still needed to vaccinate laboratory personnel handling vaccinia virus and other members of this virus family. Some of these viruses are found in nature and cause illness among animals, and some are used in research to make new, safer vaccines against a variety of infectious diseases. Secondly, smallpox vaccine (vaccinia) will also be needed in case of a deliberate or accidental release of smallpox virus (variola), which is a very unlikely event but currently of great concern to some countries.

**4) Disposal of biological materials and pharmaceuticals**

All biological materials and pharmaceuticals such as vaccines, drugs and diagnostic specimens should be disposed of safely. Some may require inactivation before disposal. This can be accomplished by autoclaving or incineration.