



## **CHOLERA OUTBREAK - SOUTHERN AFRICA**

Cholera is an age old scourge that strikes fear in the minds of people all over the world now, as it did in the mid 1800's when cholera swept through London and Dr John Snow finally proved that the disease was spread through contaminated water - from the Thames at the time.

Water in London is now safe but millions of mainly impoverished people across the globe have been affected by cholera since the present pandemic started in the Ganges delta in India in 1961.

The present outbreak on the northern border of South Africa is no different: poor government and the destruction of water and sanitation infrastructure in Zimbabwe have forced the population to drink from sewage contaminated water sources.

The outbreak has spread into South Africa with refugees seeking medical assistance and truck drivers returning from Beit Bridge to as far afield as Durban.

An understanding of the simple fact that the bacteria that cause cholera is spread from person to person by contaminated food and water and that urgent but simple rehydration can save many lives, will go a long way to allay irrational fear.

Ignorance leads to fear - and sometimes death,

### **PRESENT SITUATION IN SOUTH AFRICA**

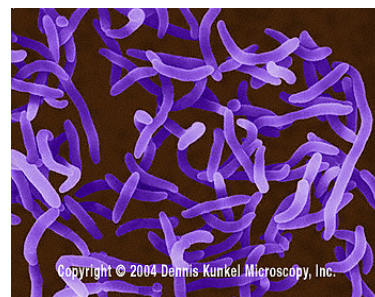
As during previous outbreaks of water borne infections (Typhoid in Delmas springs to mind) the Department of Health is urging all communities who draw water from rivers, dams or streams to continue to purify water before consumption, by

- Boiling (rolling boil for 3 minutes) or
- Adding one capful of bleach to 25 litres of water

*(it is advisable that water be filtered through clean cloth or linen) and allowing it to stand for a minimum of 4 hours before use but preferably overnight.*

It is regrettable that such notices are still necessary in our country when in fact politicians should have seen to it years ago that sound engineering ensures safe access to water to all South Africans. Instead we are experiencing the steady deterioration of infra-structure that ultimately leads to the situation now seen in Zimbabwe.

Those unfortunate enough to fall ill with the disease (Seventy five percent of persons who are infected with the *Vibrio cholera* are asymptomatic but can infect other who may fall ill), are advised to seek URGENT medical attention.



- Five days after becoming infected, cases may present with sudden onset, profuse, painless, watery diarrhoea with flecks of mucous. No blood. (Rice water) There is no blood in the stools that classically remind of Rice Water
- Patients may sometimes vomit. Adults do not have a fever but children sometimes do present with fever. All victims may suffer from muscle cramps and will if untreated become acidotic and develop shock, kidney failure and an irregular heart beat that will ultimately lead to cardiac arrest.

The crux of medical treatment is urgent, rapid and adequate rehydration. Antibiotics play a very minor role.

## THE TRAVELLER AND CHOLERA

Until the early seventies the WHO recommended cholera vaccination as a means to prevent the spread of the disease across borders. Since then the requirement has been deleted from the International Health regulations as it has been shown that vaccination does *not* curb the international spread of the illness. Therefore proof of vaccination against cholera should no longer be required of any traveller by ANY authority. The new International Certificate of Vaccination no longer provides a specific space for recording of cholera vaccination. South Africans may want to take note of this as they MAY be confronted by misguided border officials in this regard.



Forcing travellers from affected countries to take antibiotics such as doxycycline or ciprofloxacin will likewise not prevent the spread of the disease and has no medical justification. On the contrary it could harm persons who are allergic to such antibiotics or the unborn babies of pregnant travellers.

Vaccination against cholera has a minor role to play and is only indicated in aid workers and certain other persons who live and work in affected communities in a cholera epidemic. Mass vaccination is not indicated during an outbreak.

The traditional parenteral cholera vaccine conveys incomplete, unreliable protection of short duration, and its use, therefore, is not recommended.

Two oral cholera vaccines that provide some protection for several months against cholera caused by *Vibrio cholera* O1 are available in a few countries. A killed cholera bacteria vaccine is available in South Africa for use in highly selected cases. It provides limited protection for a limited period against cholera and perhaps even against the much more common 'traveller's diarrhoea'. The use of the vaccine may be considered by persons who may be regularly exposed to contaminated water in the course of their work or participating in water sports - the Midmar mile and Duzi canoe marathon for example. These persons should bear in mind that other vaccine preventable waterborne diseases also pose a threat - Hepatitis A and less commonly but still lurking in the shallows, typhoid. These vaccines afford a higher level of protection and for much longer.

Ultimately communities and politicians bear responsibility for the provision of clean water to the inhabitants of a country.

Travellers to areas where such measures fail would do well by sticking to the old travellers' wisdom: Cook it, peel it, boil it - or leave it!

