DEPARTMENT OF HEALTH

HEALTH FACT SHEETS

(Updated 2 June 2009)

BILHARZIA (SCHISTOSOMIASIS)

Case Definition
The patient may present with blood in urine or stool, rash or itchy skin, fever, chills, coughs and muscle aches can begin within I-2 months of infection.

Case Management
Suspected cases should be referred to health centre for diagnosis and treatment. Drugs are available for treatment of schistosomiasis.

Contacts
Infected patients should be treated and health education for contacts and community should be intensified

Environmental Health
- Monitor quality of water.
- Conducting awareness campaigns and mounting of signboards.

Prevention and Health Education
- Avoid swimming or playing in fresh water when you are in areas in which schistosomiasis occurs. Drink safe water.
- Bath water should be heated for 5 minutes at 150° F.
- Water held in a storage tank for at least 48 hours should be safe for showering. Vigorous towel drying after an accidental, very brief water exposure may help to prevent the schistosoma parasites from penetrating the skin.

CHOLERA

Signs and Symptoms
Any person with rice watery diarrhoea, vomiting and sunken eye with dehydration should be considered as a suspected cholera case.

Treatment
Any such person should be given oral rehydration solution (ORS) and urgently referred to nearest health facility.

Contacts/family members

Burials and Social Gatherings:

- Burial should be left to trained staff and should occur without delay after disinfection of the body, beddings and all personal belonging of the deceased.
- Burial ritual and ceremonies should be kept minimal.

Water and Sanitation:

- One should drink only water treated by boiling, chlorination or filtration.
- After treatment, drinking water should be stored in appropriate containers and protected from contamination.
- Human waste should be disposed off properly, e.g. in latrines.
- Solid and liquid waste should be disposed off properly, e.g. incineration or burial.
- Pest control measures should be applied against flies, cockroaches and rodents.

Health Education

- Community members including students, mothers, workers, and patients with other diseases should be informed of cholera.
- All possible media should be used, e.g, radio, TV, churches, rallies, public gatherings, posters, booklets, etc.
- Information for the community include water treatment, handwashing with soap and preparation of ORS [8 teaspoon of sugar, half teaspoon of salt in a one litre of treated water].
- Hands should be washed frequently with soap and water, e.g. before eating or handling food and drinks, after defecation and after handling sick persons, or their belongings.
- Hands should be thoroughly washed with water and soap before handling food.
- Food should be cooked and eaten warm.
- Raw food, non-cooked food and pre-cooked food items exposed for long time should be avoided. Peeling raw food is also advised.

FOOD SAFETY

What is food safety?

Contaminated food and water have been known to be sources of illness in human societies since antiquity. Food borne diseases are still among the most widespread health problems in the contemporary world. In rich and poor countries alike, they impose substantial health burdens, ranging in severity from mild indisposition to fatal illnesses.

Food safety is an increasingly important public health issue and according to the World Health Organisation (WHO), governments all over the world are intensifying their efforts to improve food safety. This is largely due to rapid globalisation and the emphasis placed on and the interest shown in the importance of the safety of food crossing national boundaries in international trade. Together with this, there has been a dramatic increase in the number of people travelling internationally for, amongst others, tourism and business purposes, including the attendance of special events such as sport, cultural and others.

The WHO defines ‘Food Safety’ as the assurance that food will not cause harm to the consumer when prepared and/or eaten in accordance with its intended use. Furthermore ‘Food Hygiene’ is defined, as all the measures necessary to ensure the safety, soundness and wholesomeness of food at all stages from its production or manufacture until its final consumption.

Food safety in South Africa

The services rendered by health authorities in South Africa aimed at ensuring that the food consumers are exposed to do not cause them any harm, is generally referred to as “food safety control”. This can be defined as a mandatory regulatory activity of enforcement by the relevant health authority to provide consumer protection and to ensure that all foods during production, handling, storage, processing, and

distribution are safe and fit for human consumption and conform to safety requirements as prescribed by law (WHO).

Various health authorities within the national health system at national, provincial and municipal levels, as well as organizers of special events such as the upcoming FIFA Confederation Cup and, service providers such as caterers / suppliers of food, are the three most important role players responsible for ensuring that the food safety management aspect and thus food hygiene, is effectively addressed during such events. Everyone has a role to play, even the consumer in ensuring that foods eaten are safe and will not cause harm.

Although South Africa is considered a developing country, the food industry of the country can be considered as a well developed and sophisticated sector, geared towards providing the needs of consumers through both the formal and informal sectors of the country's economy. From food production on the farm, to further processing at factory level, through to retail level, both as foodstuffs offered for sale to consumers at outlets such as supermarkets or shops (spaza shops- within disadvantaged communities), or further prepared as ready to eat meals by catering facilities such as restaurants, fast food outlets, street food vendors, etc.; legislation exists aimed at ensuring that all foodstuffs and food handling facilities comply to health standards aimed at protecting consumers from unsafe food and food prepared under unhygienic conditions.

To ensure compliance, Environmental Health Practitioners (EHPs) are employed by provincial and municipal health authorities within the locations where the 2009 FIFA Confederation Cup tournament will be hosted, who will be responsible to monitor all foodstuffs and facilities through regular inspections and sampling of foodstuffs in the interest of ensuring that all parties concerned play their part in protecting consumers from the risks of unsafe foodstuffs.

Although South Africa was not isolated from the effects of the issue related to the presence of melamine in milk and dairy products that originated from China during the second half of 2008, steps were taken swiftly by all the health authorities concerned, which ensured that no health risk to consumers occurred. As the case is with most countries in the world, both developed and developing, cases of food poisoning do occur from time to time. However, visitors to South Africa can be assured that no serious incidents of food poisoning were reported recently from most urban areas within the country, including the locations where the 2009 FIFIA Confederation Cup tournament will be hosted.

Five Keys to Safer Foods

The Department of Health supports the training programme for food handlers developed by the WHO on the 'Five Keys to Safer Foods' and is currently in the process of rolling it out countrywide to the provinces and municipalities through the six universities of technologies involved in the training of Environmental Health Practitioners. The Department further encourages those who wish to prepare the own meals to also apply the following principles of the Five Keys programme:

- Keeping hands as well as surfaces coming into contact with food always clean.
- Separate raw and cooked foods to prevent cross contamination.
- Cook all foods thoroughly.
- Keep food at a safe temperature at all times, which is either below 5°C, or above 60°C.
- Use safe water and raw materials when preparing food.

Although foodstuffs sold by formal outlets such as supermarkets, restaurants, fast food outlets, etc. are generally of high quality and considered to be safe, visitors are, accept for in the case of fresh fruits and vegetables, advised to be cautious when obtaining foodstuffs, especially ready to eat prepared meals and

other dishes, from informal outlets such as street food vendors. The general rule that applies in these instances is: **peal it…., cook it…., cool it…., or, leave it!**

HEPATITIS

Case Definition

Hepatitis is a viral infection of the liver. There are several types of viral hepatitis infections, namely, A, B, C, D, E, F and G.

The most common symptoms are loss of appetite, fatigue, fever, body aches, nausea and vomiting, and stomach pain. In more serious cases patients may have dark urine, light coloured bowel movement and yellowing of skin or eyes (jaundice).

Case Management

There is no specific treatment for hepatitis. Therapy should be supportive and aimed at maintaining comfort and adequate nutritional balance.

Drug and alcohol induced hepatitis can be managed by avoiding the causative agents.

Patients with HBV/HIV co-infection may have exacerbation of hepatitis due to ARV treatment. Choose anti-retroviral regimens based on anti-HBV activity.

Contacts

All contacts with the infected person should be referred to the health facility for assessment and given appropriate advice on prevention and treatment.

Health Education

Preventive measures include:

- Good personal hygiene
- Avoid infected contacts
- Immunisation
- Use of condoms

MALARIA

Case Definition

Malaria is a disease caused by a parasite that is transmitted from person-to-person by the bite of an infected *Anopheles* mosquito. The symptoms of malaria include fever, chills, headache, muscle aches, and malaise (a general sick feeling).

Symptoms can develop as early as 6-8 days after being bitten by an infected mosquito or as late as several months after departure from an area where malaria is present, after antimalarial drugs are discontinued.

Case Management

- Prompt medical treatment is necessary.
- Case should be referred to health centre.

Prevention

Preventing mosquito bites is the most effective way to prevent malaria. Contact may be minimised by:

- Indoor residual spraying
- Applying insect repellent
- Use of insecticide treated nets
- Travellers should start prophylaxis treatment before travelling to malarious areas.

Identify high-risk areas to guide preventive measures.

Health Promotion
To increase public awareness for prompt care seeking behaviour and preventive measures at household and community levels.

MEASLES

Description
Measles is a respiratory disease caused by a virus. It is also called rubeola. The measles virus usually grows in the cells that line the back of the throat and lungs.

Causes
How it is spread Measles spreads through the air by breathing, coughing or sneezing. It is so contagious that any child that is exposed to it and has not been vaccinated will probably get the disease.

Signs & Symptoms
Measles causes fever, a runny nose, coughing and a rash all over the body. You may also have red, watery eyes and tiny white spots inside your mouth.

Prevention
The only way to completely prevent measles is to get vaccinated. The disease is very contagious and if you come into contact with anyone that has been infected, you will probably get it.

Treatment
If you get measles there are limited treatment options for the infection itself. Give your body time to deal with the virus and recover from the effects. Your healthcare provider may give you medicine to help you cope with the symptoms. Bed rest and a healthy diet are important. Plenty of fluids including water and fruit juices will help you cope with the infection. You may find bright light or sunlight uncomfortable, so isolate yourself in a dimly lit room.

MENINGITIS

Case Definition
Any person with fever and neck stiffness should be considered as a suspected case

Case Management:
Any such person should be referred urgently to nearest health centre

Contacts/family
This disease can be transmitted from one person to another especially at close contact, e.g. classroom, barracks, crèches, etc. Vaccination and prophylaxis helps in the prevention of the disease

Health Education:
All community members should be informed about the disease. The community should be informed that meningococcal meningitis is a serious communicable disease transmitted from person to person through the respiratory tract. Many persons may harbour the germ without becoming sick.

Changes in the weather, especially warm, dry and dusty conditions weaken natural defence mechanisms and may help the germ to cause clinical symptoms. Crowding and poor ventilation should be avoided.

There is an effective vaccine against the disease. Although, the current vaccine protects for a period limited to three years, it is very effective for the control of starting outbreaks. There is also an effective treatment. Early treatment help prevent death and complications.

POLIO

Description
Polio is a highly infectious disease caused by a virus that invades the nervous system.

Causes

How it is spread? Polio is most often spread through contact with the stool of an infected person. This can happen in one of many ways:

- eating food or drinking liquids that are contaminated with the polio virus
- touching surfaces or objects contaminated with the polio virus and then placing the contaminated hand in your mouth
- sharing food or eating utensils with someone infected with the polio virus.

Less commonly, it can be spread through respiratory droplets or saliva.

Signs & Symptoms
About 95% of people infected with polio will have no symptoms. Some have minor symptoms such as fever, fatigue, nausea, headache, flu-like symptoms, stiffness in the neck and back and pain in the limbs. Fewer than 1% of polio cases result in permanent paralysis of the limbs.

Prevention
A polio vaccine is given to all children as part of the childhood vaccination schedule.

Treatment

Because there is no cure for polio, treatment usually consists of treating the symptoms until the patient recovers. It can include fluids, medications and rest.

RABIES

Case Definition

Rabies is a zoonotic viral disease, which infects domestic and wild animals. It is transmitted to other animals and humans through close contacts with saliva from infected animals (i.e. bites, scratches, licks on broken skin and mucous membranes). The symptoms include involvement of the respiratory, gastrointestinal and/or central nervous systems, hyperactivity (furious rabies) or paralysis (dumb rabies), coma and death.

Case Management

Treatment
There is no treatment for active rabies. Once symptoms develop, death is the unfortunate outcome.

Prevention

Post-exposure treatment

As part of wound management, the most effective mechanism of protection against rabies is to immediately vigorously wash and flush wound or point of contact with antiseptic solution (chlorhexidine) or soap and water. Anti-rabies vaccine should be given for Category II and III exposures as soon as possible. Anti-rabies immunoglobulin should also be given for all Category III exposures and for Category II exposures in immunosuppressed patients. Suturing should be avoided.

Animal vaccination
Prevent rabies through dog and cat vaccination. The veterinary services should be notified and information obtained on the epidemiological situation in the area.

Health Education
Ensure regular vaccination campaigns of domestic canines.

TB

Case definition

MDR TB:
Multidrug Resistant tuberculosis is defined as tuberculosis disease caused by strains of *Mycobacterium Tuberculosis* that are resistant to both Rifampicin and Isoniazid, with or without resistance to other drugs.

XDR-TB:
Extremely Drug Resistant Tuberculosis is defined as tuberculosis disease caused by strains of Mycobacterium tuberculosis that are resistant to Rifampicin and Isoniazid and in addition also resistant to any fluoroquinolone and at least one of the three injectables used as second line drugs for the treatment of MDR-TB (Capreomycin, Amikacin and Kanamycin)

Signs and Symptoms:
Coughing for longer than 2 weeks, malaise or tiredness, loss of weight, night sweats, fever and loss of appetite.

M(X)DR TB Outbreak
Variations in incubation periods and expression of disease with some patients manifesting as latent disease and others as active disease contribute to difficulties in recognition. An increase in expected TB cases would be therefore difficult to use as a criteria to recognize an outbreak. Unusual patterns of drug resistance are an important alert to the possibility of an outbreak. Relapse of TB disease in a cluster of apparently successfully treated patients may also alert one to the possibility of an outbreak.

A cluster of cases, often with resistant or unusual susceptibility pattern, that may be epidemiologically linked.

Management
Susceptibility testing of the tuberculosis strains is critical as outbreaks frequently involve drug resistant strains, frequently with unusual or extensive drug resistance. Molecular fingerprinting of isolates must be carried out to confirm the epidemiological links. Sputum specimens from people with suspected drug resistant TB must always be submitted for microscopy, culture and drug susceptibility testing.

There is a standardised regimen for the treatment of MDR TB using a combination of drugs, which the patient has not been exposed to. For XDR-TB the regimen is individualised based on the resistance profile of the patient and drugs to which they are still sensitive to are used but a combination of at least four drugs should be used.

Household Members
Should carry out symptom screening and all those who are symptomatic should be investigated further by sputum examination (culture and sensitivity).

Gatherings
All close contacts in aggregate settings (jails, hospitals, schools, hospices) should be screened like the household members.

Prevention
MDR-TB is best prevented by treating drug sensitive TB properly. However, MDR-TB can be transmitted and cases of MDR-TB should be isolated, especially in settings where there are also HIV positive people.

Children under the age of 5 in household contact with an MDR-TB case should receive chemoprophylaxis – the choice of drugs will depend on the sensitivity pattern of the organism of the index case.

Health Education
Community members should be informed of an outbreak of MDR-TB. All possible media should be used but care should be taken not to stigmatise the disease or the index case and also not to spread panic in the community. Information to the community should include symptoms of TB and what to do if symptoms are present.

YELLOW FEVER

Case Definition
Yellow fever is a vector borne viral disease transmitted between humans by a mosquito. It is characterised by an acute onset of fever, hepatitis (inflammation of the liver), and albuminuria (protein in the urine), followed by remission, renal (kidney) failure, shock, and generalised haemorrhages (bleeding).

Case Management
There is no specific treatment for yellow fever, besides supportive care.

Health Education
There are two actions travellers can take to avoid yellow fever:
1. General precautions to avoid mosquito bites should be followed by everyone.
2. Most adults and children over nine months of age can receive the yellow fever vaccine.

General precautions to avoid mosquito bites include the use of insect repellent, protective clothing, and mosquito netting. Yellow fever vaccine is a live virus vaccine. A single dose confers immunity lasting 10 years or more. Some countries require travellers to have received yellow fever vaccine within the last 10 years as a condition for entry.