

Dracunculiasis

About guinea-worm disease

Temporary disability can leave many patients unable to leave their beds for a month during and after the emergence of the worm. This usually occurs during the peak agricultural activities and when labour is in a great demand.

The epidemiology of the disease is determined largely by the use of open stagnant water sources such as ponds and sometimes shallow or step wells. Man-made ponds are the main source of transmission.

Guinea-worm disease is seasonal, occurring with two broad patterns found in endemic areas of Africa, depending on climatic factors.

In the Sahelian zone, transmission generally occurs in the rainy season (May to August).

In the humid savanna and forest zone, the peak occurs in the dry season (September to January).

However, there are local variations in these patterns. Other risk factors are mobility and infection having occurred the previous year.

Guinea-worm disease is a vulnerable disease: man alone is responsible for maintaining its fragile transmission cycle. It is therefore possible to permanently curtail transmission by applying the following measures:

- Effective surveillance to detect all cases within 24 hours of worm emergence and containment of all cases;
- **Ensuring access to safe drinking water and converting unsafe sources to safe ones;**
- The construction of copings around well heads or the installation of boreholes with handpumps. This would prevent not only dracunculiasis but also diarrhoeal diseases.
- **Regular and systematic filtering** of drinking water derived from ponds and shallow unprotected wells or from surface water. Finely-meshed cloth or, better still, a filter made from a 0.15 mm nylon mesh, is all that is needed to filter out the cyclops from the drinking water;
- Treatment of unsafe water sources with temephos to kill the cyclops;
- Health education and social mobilization to encourage affected communities to adopt healthy drinking water behaviour.

If these measures are implemented by village communities, the ultimate goal of eradicating guinea-worm disease will be achieved.