



World Health
Organization

Buruli ulcer: a pocket guide for community health workers



Buruli ulcer is a disease caused by a germ which affects mainly the skin, but it can also affect the bones.

Buruli ulcer is found in many places around the world often **near water** (in lakes, rivers ...).

The exact **mode of transmission** of the germ from the environment to humans is not known.

Buruli ulcer **can affect anyone** at any age, but children are most often affected.

Buruli ulcer mainly affects the arms and legs; but it can affect **any part of the body**.

Buruli ulcer is treated in hospital with specific drugs and by surgery.

Buruli ulcer **disability can be prevented** through early interventions.

Early diagnosis and treatment of Buruli ulcer are very important in preventing serious complications.

your community should know that...

Buruli ulcer is a disease caused by a germ

- ● ● **Buruli ulcer is not** caused by witchcraft
- ● ● **Buruli ulcer is not** due to a curse
- ● ● **Buruli ulcer is not** a punishment
- ● ● **You cannot** get Buruli ulcer through contact with an affected person

Buruli ulcer: global distribution



© WHO/Global Buruli Ulcer Initiative – Map: after Public Health Mapping & GIS, WHO Communicable Diseases 2005

- ● ● Today, Buruli ulcer has been reported in **30 countries** but the disease is not well-known and is therefore under-reported.
- ● ● Within each country, Buruli ulcer occurs in some specific places, often in wet areas.
- ● ● The Ministry of Health in your country will provide information on where Buruli ulcer occurs and how many cases have been reported.

environmental factors



Nyong River, Cameroon – Credit: Dr A. Um Boock



Nyong River, Cameroon – Credit: Dr A. Um Boock

- ● ● Buruli ulcer often occurs in places near **water bodies**, for example slow-flowing rivers, ponds, swamps, lakes...
- ● ● The germ that causes Buruli ulcer lives in a wet environment but the exact place is not known.
- ● ● It is suspected that some water insects may transmit the disease.

nodule



Credit: Dr S. Etuaful

- ● ● A **nodule** is a small painless swelling under the skin of about 3 centimetres in diameter.
- ● ● This is often the beginning of the disease but only a few affected people go to hospital at this stage.
- ● ● At the nodular stage, treatment is simple and prevents deformities.

plaque



Credit: Dr Annick Chauty, Association Française Raoul Follereau, Benin

- ● ● A **plaque** is a large painless swelling of more than 3 centimetres in diameter with clearly marked borders.
- ● ● The skin feels hard like cardboard.
- ● ● Treatment of this form of the disease can be difficult.
- ● ● People affected should be advised to go to hospital without delay.

oedema



Credit: National Buruli Ulcer Control Programme, Benin

- ● ● **Oedema** is a large painless swelling; it often involves the arms and the legs.
- ● ● Treatment of this form of the disease is difficult.
- ● ● People affected should be advised to go to hospital without delay.

ulcer



Credit: National Buruli Ulcer Control Programme, Benin



Credit: Dr S. Etuaful

- ● ● Typical **ulcers** are not very painful; they have undermined edges and often have whitish-yellowish slough in the centre.
- ● ● With good treatment, small ulcers can heal with no deformity. Unfortunately, most affected people do not go to hospital at this stage.
- ● ● Large ulcers are very common because most affected people wait until it is too late. These ulcers often lead to serious deformities and treatment at this stage is very difficult and expensive. Any person who has an ulcer should be advised to go to hospital without delay.

arms and legs deformities



Credit: Professor H. Assé

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- ● ● Arms and legs with **deformities** like these are common because affected people often go to hospital too late.
- ● ● It is important to inform the community about the serious complications that can result from Buruli ulcer and advise those affected to go to hospital without delay.

trunk and face deformities



Credit: National Buruli Ulcer Control Programme, Benin

Credit: Dr R. Zilliox

- ● ● Trunk and face **deformities** like these are common because affected people often go to hospital too late.
- ● ● Sometimes the eyes are damaged, which may lead to blindness.
- ● ● Complications like these can be avoided if people affected go to hospital without delay.

no deformity



Credit: Professor H. Assé

- ● ● If Buruli ulcer patients are identified and treated rapidly, simple surgery is needed. They will only have a small scar but **no deformity** and no disability.
- ● ● Today, some specific drugs can be used to treat Buruli ulcer.
- ● ● When people with a nodule or small ulcer go to hospital rapidly, surgery may then be avoided.

cancer



Credit: Dr S. Etuaful

- ● ● If Buruli ulcers are not properly treated, they may turn into **cancer** after some years.
- ● ● Usually, traditional treatments used for Buruli ulcer leave bad scars that can easily develop into cancer.
- ● ● Cancers are painful, have rough surfaces and bleed very easily.
- ● ● Sometimes, people mistake cancers for Buruli ulcer.
- ● ● Any person who has an ulcer that looks like this should go to hospital without delay.

amputation



Credit: Ms L. Lehman

- ● ● In some late and severe cases, **amputation** is necessary.
- ● ● People who have been amputated or who have other deformities should receive appropriate rehabilitation assistance.
- ● ● The community should also help these people to be part of the society.

Example of basic information to be recorded

Family name _____ First name _____

Address _____

Age _____ Sex F M Date _____

Patient classification new recurrent

Location of lesion: leg arm chest

abdomen back face neck

Clinical form:

nodule plaque oedema ulcer

1. **You** can be **the link** between your community and the health centres or hospitals.
2. **You** can help to **increase awareness** about Buruli ulcer in your community to encourage those affected to report rapidly.
3. **You** can **identify people** with suspected Buruli ulcer, register and refer them to the nearest health centre or hospital.
4. **You** can help to **manage simple cases** and supervise those on drug treatment in your community.
5. **You** can **support and follow up** people who have returned to the community after treatment at health centres or hospitals.

Buruli ulcer complications are preventable



Credit: National Buruli Ulcer Control Programme, Benin

Go to hospital without delay!

This pocket guide is to help community health workers understand Buruli ulcer and to contribute to its control in their communities. It was produced thanks to the financial support from ANESVAD Foundation, Spain.

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<http://www.anesvad.org/buruli/pub/ingl/home.htm>

<http://www.who.int/buruli/en>