

# Fake Medicines and Malaria



Each year approximately **627,000** people die from malaria (uncertainty interval, 473,000–789,000), a preventable and treatable disease<sup>1</sup>



Most cases and deaths occur in Africa



Children under 5 years are the most affected: **Every minute 1 child dies** of malaria



## MALARIA IS A DISEASE THAT CAN BE PREVENTED AND TREATED... WHEN USING THE RIGHT MEDICINES



Genuine malaria medicines make a difference between life and death



WHO recommends treatment with quality-assured artemisinin-based combination therapies (ACTs)<sup>2</sup>



Genuine ACTs are rapidly and reliably effective, curing more than 90% of malaria cases<sup>3</sup>



50 countries are on track to reduce their malaria cases by 75% by 2015



The strides achieved so far have in large part rested on improving access to effective treatment for correctly diagnosed cases, long lasting insecticidal nets for prevention and raising awareness among communities



Let's keep fake medicines from undermining these efforts!

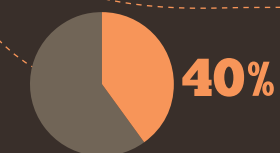


# 1/3

## OF ANTIMALARIALS IN AFRICA ARE FAKE



In sub-Saharan Africa - where the burden of malaria is the greatest - the prevalence of fake medicines can be even higher



In Ghana and Cameroon: up to 40% are fake



In Nigeria: up to 64% are fake

## FAKE ANTIMALARIAL MEDICINES KILL



It has been estimated that fake antimalarial medicines contribute to nearly **450,000 preventable deaths every year**<sup>6</sup>



Fake antimalarial medicines kill hundreds of children every day<sup>7</sup>: **Every 5 minutes a child dies of malaria because of taking fake medicines**

## FAKE ANTIMALARIALS

- result directly in deaths and morbidity<sup>5</sup>
- increase the incidence of adverse effects<sup>8</sup>
- diminish patients' and health practitioners' confidence in genuine antimalarial medicines<sup>9</sup> and health service providers<sup>10</sup>
- increase the risk of the emergence and spread of resistant strains of malaria parasites<sup>11,12</sup>

## CASE STUDIES



In 2005, a 23 year old man died in Eastern Myanmar from cerebral malaria after being given fake medicine, bought in good faith by his local hospital. When the village committee discovered the cause of this needless death, they were sufficiently angry to collect all packs of these fake antimalarials they could find in local shops and burnt them in front of the whole village.



In 2009, Nigeria intercepted a consignment of nearly 700,000 doses of fake antimalarials. This quantity of fake medicines, if not intercepted, would have been sufficient to give ineffective or dangerous "medications" to hundreds of thousands of pregnant women and children.



In 2012, in Angola, 1.4 million packets of fake malaria medicines were found in a container from China, hidden inside a shipment of loudspeakers. The fake pills contained no active ingredient. Instead, they were made of calcium phosphates, fatty acids and yellow pigment. The fakes — enough to treat more than half the country's annual malaria cases, had they been genuine — are part of a proliferation of bogus malaria drugs in Africa that threaten to undermine years of progress in tackling the disease. A large international investigation is now underway.

## RECOMMENDATIONS



Always buy WHO prequalified antimalarial medicines from a reputable source where medicines are stored properly.



Always check the packaging carefully:  
- Check the expiry date and if the dosage is correct.  
- Check if the patient information leaflet is in the correct language.



Closely examine the appearance of your medicines:  
- Check if the pills are cracked or chipped.



Make sure you have a malaria diagnostic test before taking an antimalarial.



All antimalarial doses must be taken within three days to be effective.



Recovery should be rapid and complete by day three of treatment if the antimalarial medicine is genuine.



Speak with your doctor or pharmacist if you have unusual side-effects after taking your medicines.



If you have any concerns about the quality of your medicines, and/or if you notice an anomaly on the packaging, instructions, blister pack, or pills, contact your health authority or the medicine manufacturer and retain packaging and any tablets for testing.

<sup>1</sup> See WHO, World Malaria Report 2013.

<sup>2</sup> See id.

<sup>3</sup> Nicholas J White, Sasithon Pukrittayakamee, Tran Tinh Hien, M Abul Faiz, Olugbenga A Mokuolu, Arjen M Dondorp, Malaria, 383 The Lancet, 723–35 (2014).

<sup>4</sup> Paul N Newton, Michael D Green, Facundo M Fernández, Nicholas P J Day, Nicholas J White, Counterfeit anti-infective drugs, 6(9) The Lancet Infectious Diseases, 302-603(2006).

<sup>5</sup> Id.

<sup>6</sup> See Kalyaperumal Karunamoorthi, The counterfeit anti-malarial is a crime against humanity: a systematic review of the scientific evidence, 13 Malaria Journal, 209(2014), available at [www.malariajournal.com/content/13/1/209](http://www.malariajournal.com/content/13/1/209)

<sup>7</sup> See Fake Malaria Drugs Kill, [www.fakedrugskill.org/](http://www.fakedrugskill.org/)

<sup>8</sup> See supra note 4.

<sup>9</sup> See supra note 4.

<sup>10</sup> See supra note 3.

<sup>11</sup> Carlos J Chaccour, Harparkash Kaur, Prof David Mabey, Jose L Del Pozo, Travel and fake artesunate: a risky business, 380 THE LANCET, 1120 (2012).

<sup>12</sup> See supra note 6.