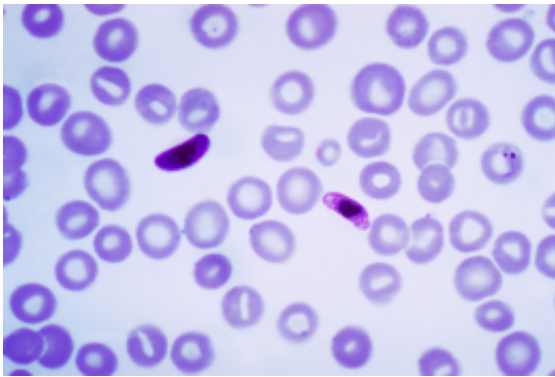


# Mini-primaquine does help stop people infecting mosquitoes with malaria

February 2 2018

---



This photomicrograph of a blood smear contains a macro- and microgametocyte of the *Plasmodium falciparum* parasite. Credit: Wikipedia.

A single dose of primaquine is thought to stop people with *P. falciparum* malaria infecting mosquitoes, which could help bring down malaria transmission. In this *Cochrane Review* update prepared by an international team of researchers and co-ordinated through the Cochrane infectious Diseases Group (CIDG) based at LSTM, the researchers added recent data to examine this question. Their findings are relevant to the global recommendation by the World Health Organization that mini-primaquine be given to all people unwell with malaria in areas where transmission is low to reduce transmission further.

In these new trials, researchers test infectivity of people by getting mosquitoes to feed on people or their blood and then measuring whether

the mosquitoes become infected with malaria. For the currently recommended dose of 0.25 mg/kg, the calculations across 3 trials with 105 participants show the percentage of people infectious 2 to 3 days after treatment is reduced from 14% of people in the control group to 2% in the [primaquine](#) group. A little later, a week after the treatment had been started, the absolute effect was smaller- with 4% infectious in the [control group](#) and 1% in the primaquine group. This shows that primaquine does reduce transmission-but it may not be to the extent that people had hoped for.

Many potentially infectious people with malaria are asymptomatic, so few would seek treatment. The question of whether a partial reduction in infectiousness for a few days would materially affect the community malaria burden is still unanswered, although [malaria](#) modelers have generally concluded that the increased impact would be marginal.

Dr Patricia Graves from James Cook University in Cairns, Australia is first author on the review. She said: "The trials show infectiousness is reduced with low dose primaquine, but the effects were relatively modest and short lived. We also do not know if this then would have any effect on [malaria transmission](#) at community level. Given the current evidence, it might be better for policy makers to concentrate on other approaches to help reduce transmission".

**More information:** Patricia M Graves et al, Primaquine or other 8-aminoquinolines for reducing Plasmodium falciparum transmission, *Cochrane Database of Systematic Reviews* (2018). [DOI: 10.1002/14651858.CD008152.pub5](https://doi.org/10.1002/14651858.CD008152.pub5)

Provided by Liverpool School of Tropical Medicine

Citation: Mini-primaquine does help stop people infecting mosquitoes with malaria (2018, February 2) retrieved 25 April 2024 from <https://medicalxpress.com/news/2018-02-mini-primaquine-people-infecting-mosquitoes-malaria.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.