



The Resistant Mosquito

Video Transcript

Welcome

KEZIAH: Malaria has been the scourge of humanity for too long. But great progress has been made over the last century in reducing the burden of this terrible disease. Since scientists at the end of the 19th century discovered that the malaria parasite was transmitted by mosquitoes, controlling the 'malaria mosquitoes' has been the most effective tool we have against it.

FREDROS: Yet as recently as 2019, there were still 229 million cases of malaria globally, and at least 409'000 deaths, the majority in sub-Saharan Africa, with Southern and South Eastern Asia and Central and South America also impacted. Young children and pregnant women are the most vulnerable.

KEZIAH: In the last twenty years, there has been a significant increase in mosquito control interventions. The development and mass distribution of long-lasting insecticide-treated mosquito bed nets offered protection to millions of people from the bites of malaria-infected mosquitoes. Along with increased access to effective drugs to treat malaria as well as improved diagnostic tests, remarkable progress has been made in reducing the burden of malaria, bringing us closer to our goal of eliminating this disease.

FREDROS: However, there is a dark cloud looming on the horizon: something that, if not addressed, could reduce the effectiveness of our ability to control the malaria mosquitoes; something that could limit our ability to prevent the transmission of the malaria parasite. The malaria mosquitoes are becoming resistant to the insecticides that have been so effective at controlling them.

KEZIAH: Mosquitoes are responsible for transmitting, or 'vectoring' other diseases too, such as the viruses that cause Dengue fever, Chikungunya and Zika. Whilst it is often different species of mosquitoes that transmit these diseases, the threat of insecticide resistance is just as real. My name is Keziah Malm.

FREDROS: And I am Fredros Okumu. We would like you to come on a journey with us. On this journey, we will look more closely at the threat of insecticide resistance, what is causing it, and what can be done to keep us on track towards our ultimate goal of malaria elimination.

KEZIAH: Our aim is that by the end of this journey, you will have an understanding of what insecticide resistance is, how it develops in a mosquito population, and how it impacts our ability to control mosquitoes. What can we do practically to prevent or delay this, and to minimise its impact through



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applied Insecticide Resistance Management? This is an interactive course. We would love to hear from you in the discussion sections of each 'step'. Don't travel on this journey alone. Please share your experiences, questions and feedback as we go along.