

# **Large-scale entomologic assessment of *Onchocerca volvulus* transmission by poolscreen PCR in Mexico.**

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To study the impact of mass Mectizan treatment on *Onchocerca volvulus* transmission in Mexico, entomological surveys were carried out in the endemic foci of Oaxaca, Southern Chiapas, and Northern Chiapas. Collected flies were screened by polymerase chain reaction (PCR) for *O. volvulus* parasites. The prevalence of infected and infective flies was estimated using the PoolScreen algorithm and with a novel probability-based method. *O. volvulus* infective larvae were not detected in flies from 6/13 communities. In 7/13 communities, infective flies were detected, with prevalences ranging from 1.6/10,000 to 29.0/10,000 and seasonal transmission potentials ranging from 0.4 to 3.3. Infected and infective flies were found in a community in Northern Chiapas, suggesting that, according to World Health Organization criteria, autochthonous transmission exists in this focus. These data suggest that *O. volvulus* transmission in Mexico has been suppressed or brought to a level that may be insufficient to sustain the parasite population.

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