

GOLD RUSH AND MALARIA IN THE AMAZON: A THREAT TO THE YANOMAMI

The Yanomami, ancestral inhabitants of the Amazon rainforests of Brazil and Venezuela, constitute one of the largest indigenous peoples in the Americas. With an estimated population of 38,045 inhabitants, this ethnic group lives in relative isolation, dispersed in 665 communities across 18 million hectares of cross border jungle. Currently, illegal gold mining expansion within that territory is threatening the well-being of the Yanomami people. By 2018, the Amazon Network of Georeferenced Socio-Environmental Information registered 4,472 locations of illegal mining in the Amazon; with 50% of them located in Brazilian Yanomami territory and 32% in Venezuela. This foreign activity has grown in recent years, bringing with it deforestation, impact on watersheds, pollution, loss of biodiversity, violence, social displacement, demobilization of health teams and an increase in infectious diseases such as malaria. This infection caused by species of the *Plasmodium* parasite and transmitted by mosquitoes of the genus *Anopheles* has the Amazon Forest as its natural landscape. The deforestation generated by open-pit gold extraction increases the populations of mosquito vectors, and with it, the risk of malaria transmission between miners and indigenous people living near disturbed forests.

In January 2023, Brazil declared the *Public Health Emergency* among the Yanomami; critical situation that continues in 2024. During all of 2023, 308 deaths were reported, 21% of them attributed to malaria; while cases increased by 75% (26,466 cases) compared to 2022, indicating that almost 100% of the Yanomami population in Brazil (18,815 inhabitants) contracted malaria (Senra 2024). In Venezuela, unofficial data indicate that at the end of 2023 there were more than 85 deaths from malaria among the Yanomami (SOS ORINOCO). This reveals a higher fatality rate than that recorded in Brazil (63 deaths) and suggests a worrying health situation. Comparatively, 89 deaths from malaria were the total reports from the 17 malaria-endemic countries in Latin America during 2022. The health situation of the Yanomami in Venezuela cannot be officially corroborated because since 2016 epidemiological figures have not been published and health information in general is censored. However, the following facts suggest a situation similar to that in Brazil.

The Yanomami move freely between Brazil and Venezuela within their territory. Illegal miners from Brazil have entered Venezuelan Yanomami territory during 2023 according to local sources. Malaria in the north of the state of Amazonas (Vene-

zuela) during 2022 showed an increase of 2.5 times compared to 2020 in response to the progressive increase in local illegal mining. Since 2014, the Venezuelan Amazonia has experienced a significant increase in gold mining and, consequently, associated malaria, as a result of the serious economic and social crisis, the permissiveness and/or lack of territorial regulations in the face of mining expansion and the weakening of the health system in Venezuela. Since 2015, the intensification of deforestation in the Brazilian Amazon, partially caused by illegal mining, has promoted a resurgence of malaria in Brazil, similar to that in Venezuela. Consequently, both countries have contributed >50% of the malaria cases in Latin America in the last 10 years.

Unfortunately, malaria when not treated in time can be fatal, mainly in children, as evidenced by studies in Yanomami communities. The dispersed settlement pattern of the Yanomami in the remote jungle, mainly in Venezuela, represents a challenge to timely care by the health system. These challenges, however, were addressed by the Yanomami Health Plan 10 years ago in Venezuela, with the training of community health agents and logistics adapted to said settlement pattern, which allowed periodic access of medical teams to the remote communities. This health care strategy, now abandoned due to the crisis in Venezuela, must be resumed. Brazil, for its part, must reinstate health personnel in positions that have been abandoned in the Yanomami ethnic territory due to mining violence. The expansion of illicit mining activities requires permanent and joint control by both countries due to the implications that this land occupation has on national security. In the short term, the urgent actions to be taken by Brazil and Venezuela must be aimed at facing and stopping the health, environmental and social emergency that endangers the fragile balance of the Yanomami, guardians of our Amazon.

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Reference

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