

Yellow fever outbreak investigations in Africa & South America: A systematic review

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TOPIC/TARGET AUDIENCE: Public health professionals interested in infectious diseases and outbreak investigations.

ABSTRACT: Background: Yellow fever poses an increased global risk with the resurgence of mosquito vectors. Neglected tropical diseases (NTDs), such as yellow fever, are not adequately presented in systematic reviews. In order to synthesize evidence to end the disparity between NTDs and susceptible populations, additional investigation of yellow fever should be prioritized. Objective: To systemically review investigations of yellow fever outbreaks in endemic regions of the world to identify strengths, limitations, and recommendations for future investigations. Methods: A literature search of two databases was conducted using the search terms “yellow fever outbreak investigation”. No time frame was given. Peer-reviewed English-language studies, case reports, clinical trials, journal articles, and observational studies were a part of inclusion criteria. Seven articles were included within this review. Conclusion: Six out of the seven outbreaks occurred in Africa. One was in South America. Lower yellow fever transmission rates in South America are indicative of higher vaccination coverage. Lack of resources, including unreliable laboratory and diagnostic facilities, and remote locations impacted how cases were managed. This review indicates that yellow fever is still burdening at-risk populations in Africa and South America, and that early vector investigation and identification will promote eradication.

OBJECTIVE(S): Compare through systematic review the transmission rates and outbreaks of yellow fever between Africa and South America with a public health focus.

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