



## PEOPLE AFFECTED

**104 cases** of which 52 pneumonic plague (23 Aug-28 Sept)

**20 deaths**

**19.23%** case fatality rate (CFR) of the current outbreak

## Key facts - PLAGUE

- Plague is caused by the bacteria *Yersinia pestis*, a zoonotic bacteria, usually found in small mammals and their fleas.
- Plague can kill quickly if left untreated, but common antibiotics can effectively cure it if they are delivered early.
- People infected with plague usually develop "flu-like" symptoms after an incubation period of 1-7 days.
- There are 2 main clinical forms of plague infection: bubonic and pneumonic.
- Bubonic plague is the most common form and is spread by rats, pneumonic by person-to-person transmission. The current outbreak combines both forms of plague.
- Plague is endemic to Madagascar, where around 400 cases of – mostly bubonic – plague are reported annually
- Madagascar's last severe plague outbreak in December 2016 affected 68 people and caused 27 deaths.

## FUNDING

### WHO

**US\$ 1.5 million** requested

**No funding has been pledged to date**



*Team members of Institut Pasteur Madagascar (IPM) dissect a rat suspected of being infected with plague during previous outbreak in January 2017.*

Pneumonic plague has been detected in several cities in Madagascar. It is a form of plague that is highly transmissible (person-to-person) and quickly causes death without treatment.

WHO is concerned that the outbreak may spread because it is already present in several cities and this is just the start of the plague epidemic season, which usually runs from September to April.

Plague is endemic to Madagascar but contrary to past outbreaks, this one affects large urban areas, including the capital and port cities. The overall risk of further spread at the national level is high, at the regional level is moderate due to frequent flights to neighbouring Indian Ocean islands, and at the global level is perceived to be low.

The outbreak is affecting the densely populated cities in Madagascar that include Antananarivo/Analamanga with 3,724,021 inhabitants, Tamatave/ Atsinanana with 1,412,021 inhabitants, Majunga /Boeny with 889,277 inhabitants, and Finanrantsoa /Haut Matsuartra with 1,333,550 inhabitants. Antananarivo is the capital city of Madagascar. Eight regions have reported cases including Sava, Boeni and Atsinanana. These coastal regions are non-endemic areas for bubonic plague.

Many of the cases identified are directly or indirectly linked to the first recognized case, which is evidence of person-to-person transmission of pneumonic plague.

Urgent public health response is required and support is needed to strengthen capacities already available at country level to control the outbreak.



## CONTACT

### Country Office:

Dr. Charlotte Ndiaye

WHO Representative and Incident  
Manager

Email: [ndiayechar@who.int](mailto:ndiayechar@who.int)

Telephone: +261 202331364

### Regional Office:

Dr. Michel N'da Konan Yao

Regional Emergency Director

Email: [yaom@who.int](mailto:yaom@who.int)

Telephone: +236 7505 9999

### Headquarters:

Dr. Margaret Lamunu

Health Emergency Officer

Email: [lamunum@who.int](mailto:lamunum@who.int)

Telephone: +41 22 791 1852

## WHO RESPONSE

WHO is working with the Malagasy Government, health actors and communities to coordinate the response, monitor the situation, and control the outbreak.

WHO teams have conducted an initial assessment, are developing an operational response plan, supporting technical and operational coordination, and are deploying emergency managers, epidemiologists, infection control experts, logisticians and risk communications experts.

The Malagasy Ministry of Public Health is leading the response by conducting field investigations and contact tracing in affected areas. Active search for cases, and isolation and treatment of the sick is ongoing. Chemoprophylaxis is provided to all contacts of confirmed and suspected cases.

The homes of those affected and their close contacts in Antananarivo have been sprayed with a chlorine-based disinfectant.

Information on pneumonic plague has been distributed to health professionals to improve case management and awareness campaigns are being conducted to sensitize those at risk of plague to prevention methods.

Recommendations to follow proper burial procedures for all suspected and confirmed cases have been provided.

WHO is also working closely with partners in the Global Outbreak Alert and Response Network (GOARN) for additional technical support as needed.

## NEXT STEPS

WHO aims to reduce morbidity and mortality associated with the plague in Madagascar and to interrupt the person-to-person transmission of pneumonic plague by:

- supporting the Ministry of Health and partners in coordinating the response
- strengthening of epidemiological surveillance
- supporting patient care
- supporting the implementation of infection control measures
- strengthening of vector control against rodents



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### Further information:

[WHO Madagascar Country Page](#)

[WHO Plague Fact Sheet](#)

[WHO Plague Background Information](#)

[Knowledge resources for plague  
responders](#)