

PLAGUE OUTBREAK

Madagascar

External Situation Report 01



Date of issue: 4 October 2017

1. Situation update

Grade

2

Cases



194

Deaths



30

CFR

15.5%

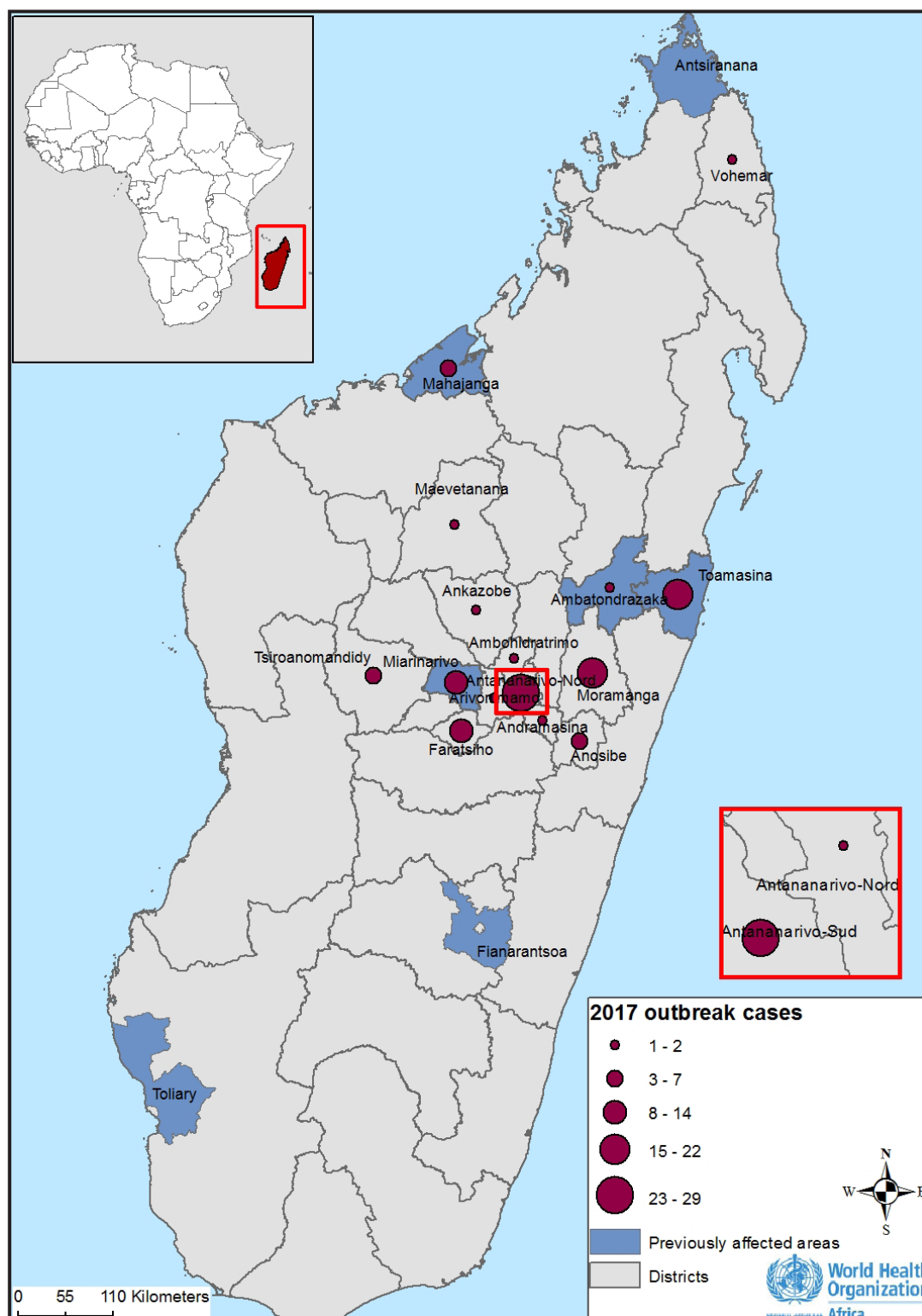
On 13 September 2017, the Madagascar Ministry of Public Health notified WHO of an outbreak of pneumonic plague, following the death of a 47-year-old woman in Soavinandriana Hospital, Antananarivo on 11 September 2017 due to a respiratory disease. Blood samples collected from the case-patient confirmed plague at the Institut Pasteur de Madagascar using rapid diagnostic test (RDT). This initial case triggered a field investigation, which established that the current outbreak started on 23 August 2017 when the index case, a 31-year-old male from Tamatave, developed a malaria-like illness. On 27 August 2017, the index case travelled by public transport (bush taxi) from Ankazobe District to Tamatave (via Antananarivo) while symptomatic, and died on the way. A large cluster of infections later occurred amongst his contacts (secondary cases), with onward transmission (tertiary cases). Since then, cases of pneumonic plague without any apparent epidemiological links have been detected in different parts of the country, including non-endemic areas and major cities.

As of 3 October 2017, a total of 194 cases (suspected, probable and confirmed) with 30 deaths (case fatality rate 15.5%) have been reported from 20 districts in 10 regions. Of these, 124 cases and 21 deaths (case fatality rate 16.9%) had the pneumonic form of the disease. Eight healthcare workers from one health facility in Tamatave have contracted pneumonic plague. Of 29 cases with specimens collected, 19 (66%) have been confirmed by either polymerase chain reaction (PCR) or RDT performed at the Institut Pasteur de Madagascar. On 3 October 2017, 37 new cases including 2 deaths have been reported.

On 29 September 2017, the Malagasy health authorities confirmed pneumonic plague as the cause of death of a Seychelles basketball coach, who was attending the Indian Ocean Basket-ball Club championship from 23 September - 1 October 2017. A South African basketball official also tested positive for plague by PCR test on 3 October 2017. The risks of further spread associated with this tournament are currently being assessed, as all the participants are being monitored.

Plague is endemic in Madagascar, especially in the central highlands, where a seasonal upsurge (predominantly the bubonic form) occurs each year, usually between August and September. There are three forms of plague infection, depending on the route of infection: bubonic, septicaemic and pneumonic (for more information, see the link <http://www.who.int/mediacentre/factsheets/fs267/en/>).

Figure 1. Geographical distribution of cases of plague in Madagascar as of 03 October 2017



As this is a rapidly changing situation, the reported number of cases and deaths, contacts being monitored and the laboratory results are subject to change due to enhanced surveillance, contact tracing activities, ongoing laboratory investigations, reclassification, and case, contact and laboratory data consolidation.

Current risk assessment

A revision to the risk assessment is currently underway. An initial rapid risk assessment based on the situation as of 19 September 2017, concluded that the overall risk at national level was high due to the high transmissibility of pneumonic plague associated with severe disease and detection of this outbreak more than two weeks after the first case died, during which cases travelled to different parts of the country, including the capital Antananarivo. The overall regional risk is moderate due to frequent flights to neighbouring Indian Ocean islands. The global risk is low.

The risk assessment will be re-evaluated by the three levels of WHO, based on the evolution of the situation and the available information.

Strategic approach to the prevention, detection and control of plague

WHO recommends the implementation of proven strategies for the prevention and control of plague. These strategies include (i) coordination of the response, (ii) enhanced surveillance, (iii) laboratory confirmation, (iv) contact identification and follow-up, (v) case management, (vi) infection prevention and control, (vii) safe and dignified burials, (viii) social mobilization and community engagement, (ix) logistics, (x) risk communication, (xi) vector control, (xii) partner engagement, (xiii) research and (xiv) resource mobilization.

2. Actions to date

Coordination of the response

- A multisectoral national response coordination committee was established, under the leadership of the Minister of Public Health, to coordinate the response to the plague outbreak. Various subcommittees have been established, addressing the key thematic areas such as surveillance, social mobilization, vector control, case management, and logistics.
- Since the declaration of the outbreak, WHO (Country Office, Regional Office for Africa (AFRO) and Headquarters (HQ) are providing direct technical and operational support to the country, and collaborating closely with partners in order to ensure rapid and effective response to this outbreak.
- WHO has classified the event as a Grade 2 emergency, based on its internal Emergency Response Framework. Accordingly, WHO has established its Incident Management System (IMS), as well as repurpose/mobilize internal and external resources.

Surveillance

- On 1 October 2017, the Ministry of Public Health and WHO deployed rapid response teams to Toamasina (Tamatave) and Fianarantsoa regions.
- Case investigations including the identification of potential exposures are being conducted.
- Active case search is being established and strengthened at the community and health facility levels in the affected areas.

Laboratory

- The Institut Pasteur de Madagascar has diagnostic capacity for plague, however, additional RDTs are being provided.

Contact identification and follow-up

- Contact tracing activities are being established and strengthened at community level.

Case management

- Training of healthcare workers on diagnosis, contact tracing and clinical management has been conducted in Antananarivo. Trainings are planned in the other affected districts.
- Provision of chemoprophylaxis for all identified contacts.

Infection prevention and control

- WHO is deploying infection prevention and control (IPC) experts to carry out a rapid IPC assessment in health facilities, build capacity of healthcare workers and support rapid implementation of IPC measures to avoid contamination of healthcare workers and prevent hospital acquired infections.

Social mobilization, community engagement and risk communications

- A National Risk Communication and Community Engagement plan for plague outbreak has been drafted and will be issued.
- A rumour mitigation plan has been developed and shared with WHO Country Office in Madagascar
- An assessment tool for knowledge, attitude and practice of people in affected communities, with an additional assessment tools for community engagement, has been developed.
- Training materials (online) for understanding plague outbreak have been shared with the country's risk communication team.

Logistics

- WHO is making provisions to ship emergency supplies, including antibiotics for treatment and prophylaxis and personal protective equipment.

Resources mobilization

- A comprehensive national response plan has been developed, with the support of WHO and partners, estimated at US\$ 5 million. The national authorities have engaged several partners, including DFID, USAID, French Embassy, GIZ, and Africa CDC to support the plague outbreak response.
- WHO AFRO made available US\$ 50 000 for immediate field operations. In addition, WHO has released US\$ 1 000 000 from its Contingency Funds for Emergencies and has issued a donor alert for US\$ 1.5 million.

Partnership

- In support of the MOH and the other national authorities, WHO and the GOARN partners have initiated deployment of emergency response teams. By 4 October 2017, 32 technical staff have been deployed, including repurposing WHO Country Office staff towards the response to the outbreak.
- WHO and the Global Outbreak Alert and Response Network (GOARN) continue to mobilize partners to provide technical and logistical support to the country, and work closely together with UN Clusters, stakeholders and donors to ensure appropriate support for the response.

Operations preparedness/ readiness

- WHO is providing operations preparedness/readiness support for plague to seven high risk priority countries, whose nationals participated in the basketball tournament, and who also have trade and travel links to Madagascar. These priority countries include South Africa, Mozambique, Tanzania, Mauritius, Comoros, Seychelles, and Reunion.
- Key readiness actions to be implemented in each priority country, in coordination and collaboration with major partners (UNICEF, CDC, ECDC, MSF, etc.) including: increasing public awareness on plague; setting up active surveillance for the disease; preposition equipment and supplies, including RDTs, PPE, and antibiotics; contingency and response planning for any imported case; in-country technical assistance through guidance and training on laboratory diagnosis, sample collection and shipment, and safe burials.

IHR Travel measures

- Based on the available information to date, the risk of international spread of plague appears very low. WHO advises against any restriction on travel or trade on Madagascar.
- International travellers should be informed about the current plague outbreak and that plague is endemic in Madagascar.

3. Summary of public health risks, needs and gaps

The most critical needs at this stage include establishing and strengthening the full complement of outbreak response structures. There is an urgent need for timely deployment of the required human and logistical resources, and the need to establish appropriate isolation and treatment facilities and scaling up infection prevention and control measures. Risk communication and community engagement are critical.

Proposed ways forward:

- Finalisation of the country response plan based on the new situation analysis and needs.
- Acceleration of the country response, focusing on places where the cases are confirmed, associated with increased vector control, active surveillance, community engagement, risk communication, and ensure access to prophylactic treatment by all contacts and treatment of sick people.
- Urgently provide technical and operations support for preparedness and readiness to the seven identified high risk countries of South Africa, Mozambique, Tanzania, Mauritius, Comoros and Reunion.

Annex 1: Timeline of reported events during the plague outbreak in Madagascar, 11 September - 3 October 2017

