PLAGUE OUTBREAK
Madagascar

External Situation Report 02

World Health Organization
REGIONAL OFFICE FOR Africa

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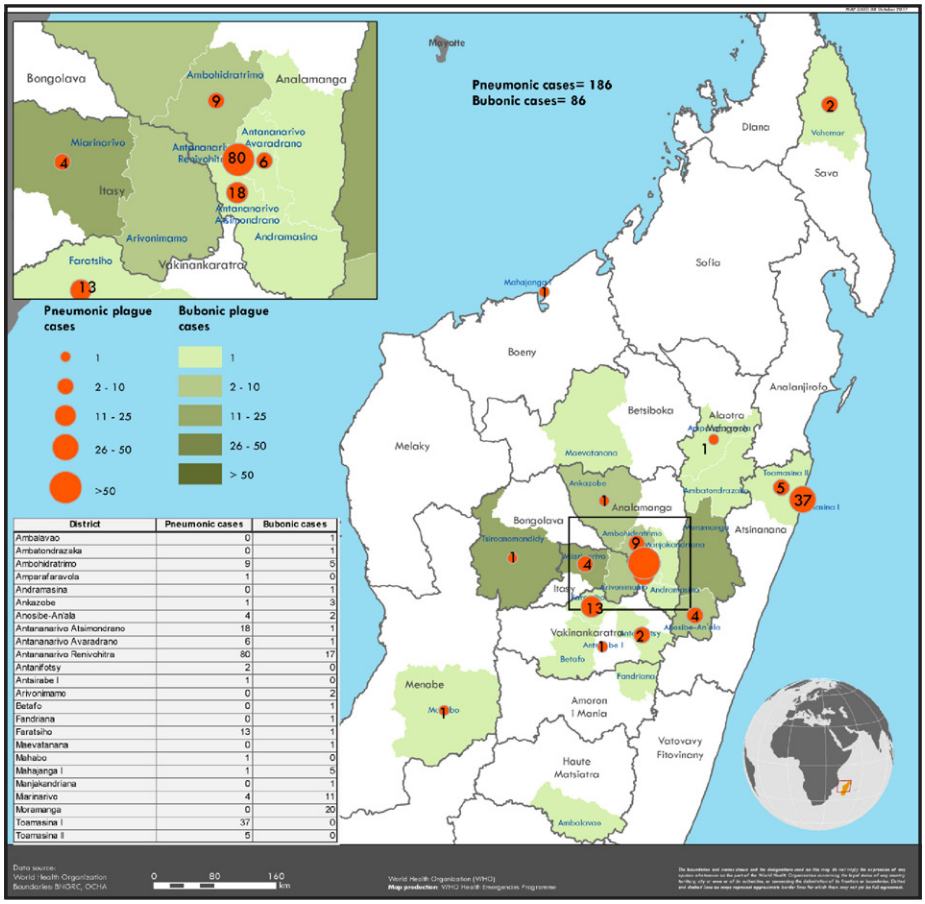
1. Situation update

Grade	Cases	Deaths	CFR
2	387	45	11.6%

The outbreak of plague in Madagascar continues to evolve. Since our last report on 4 October 2017, a total of 230 new suspected cases including 17 deaths (case fatality rate 7.4%) were reported. Between 1 August and 8 October 2017, a total of 387 cases (suspected, probable and confirmed) including 45 deaths (case fatality rate 11.6%) have been reported from 27 out of 114 districts in the country. Of these, 277 cases (71.6%) had the pneumonic form of the disease, 106 were bubonic plague, one case was septicaemic plague, and 3 cases were unspecified. Of 279 cases reported to the Central Plague Laboratory of the Institut Pasteur of Madagascar, 38 were confirmed by polymerase chain reaction (PCR), 113 were classified as probable cases after testing positive on rapid diagnostic tests (RDT) and 123 remain suspected cases, pending results. Fourteen (64%) out of 22 regions in the country (including the North and South-east Regions that are considered non-endemic) have been affected. At least eight healthcare workers from one district health hospital have contracted plague since 30 September 2017.

Plague is known to be endemic on the Plateaux of Madagascar (including Ankazobe District where the current outbreak originated) and a seasonal upsurge (predominantly the bubonic form) usually occurs early every year between September and April. Unlike the usual endemic pattern, the plague season begun early this year, and the current outbreak has affected major urban centres, including Antananarivo (the capital city) and Toamasina (the port city).
There are three forms of plague, depending on the route of infection: bubonic, septicaemic and pneumonic (for more information, see the link http://www.who.int/mediacentre/factsheets/fs267/en/).

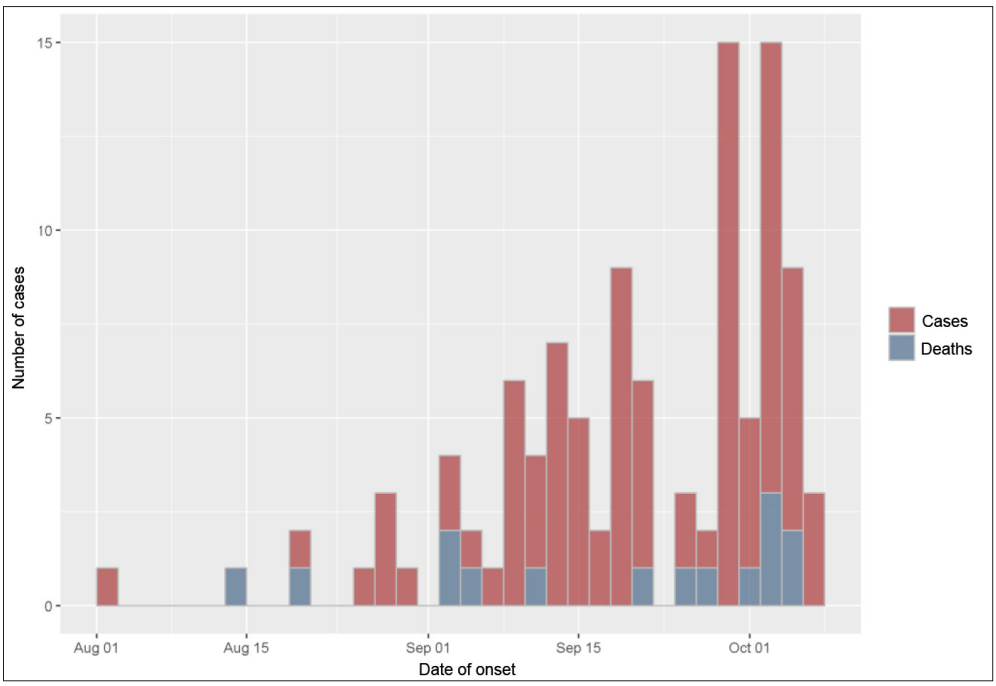
Figure 1. Geographical distribution of cases of plague in Madagascar as of 06 October 2017



District	Pneumonic cases	Bubonic cases
Ambalavao	0	1
Ambatondrazaka	0	1
Ambohidratrimo	9	5
Amparafaravola	1	0
Andramasina	0	1
Ankazobe	1	3
Anosibe-An'ala	4	2
Antananarivo Atsimondrano	18	1
Antananarivo Avaradrano	6	1
Antananarivo Renivohitra	80	17
Antanifotsy	2	0
Antsirabe I	1	0
Arivonimamo	0	2
Betafo	0	1
Fandriana	0	1
Faratsiho	13	1
Maevatanana	0	1
Mahabo	1	0
Mahajanga I	1	5
Manjakandriana	0	1
Marinarivo	4	11
Moramanga	0	20
Toamasina I	37	0
Toamasina II	5	0

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.

Number of cases and deaths in plague outbreak in Madagascar, 1 August - 6 October 2017



Current risk assessment

While the current outbreak was triggered by the occurrence of one large epidemiologically-linked cluster, cases of pneumonic plague without apparent epidemiological links have since been detected in 14 regions across the country, including densely population cities of Antananarivo and Toamasina. Due to the increased risk of further spread and severe nature of disease, the overall risk at the national level is considered very high. The overall regional risk remains moderate due to frequent travel (by air and sea) to neighbouring Indian Ocean islands and several other African countries. The overall global risk is perceived to be 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 (MOPH), 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

- WHO and CDC are supporting the Ministry of Health to establish, clean and analyse the plague national data base.

Laboratory

- Diagnostic capacity for plague is available at the Institut Pasteur de Madagascar. However, additional RDTs are being provided.

Contact identification and follow-up

- On 7 October 2017, a total of 75 trainers have been trained on contact tracing activities. Mobilization of community health workers and recruitment of supervisors for contact tracing is ongoing. A total of 968 community health workers will be trained from 9 - 10 October 2017.

Case management

- Médecin du Monde is setting up five isolation and treatment centre for the management of plague cases in Antanarivo.
- MSF deployed 70 personnel to support response in Tananative.

Infection prevention and control

- WHO, with the support of other partners, adapted a tool for rapid assessment of infection prevention and control (IPC) in the health facilities.
- WHO is deploying 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

- WHO, UNICEF, and the Malagasy Red Cross are members of a communication and social mobilization committee, coordinated by the MoPH. The committee is implementing communication activities related to plague, with involvement of community health workers.

Logistics

- WHO has delivered 1 190 000 doses of antibiotics to the MOPH and partners. The consignment comprising of different types of drugs are used for both curative and prophylactic care, enough to treat up to 5 000 patients and protect up to 100 000 people who may be exposed to the disease. The medicines are being distributed to health facilities and mobile health clinics across the country. A further supply of 244 000 doses is expected in the coming days.

Resources mobilization

- WHO has released US$ 1.5 million through its Contingency Fund for Emergencies and regional emergency funds to cover the most immediate needs. However, US$ 5.5 million is needed to support the plague response during the next three months.
- A comprehensive national response plan has been developed, with the support of WHO and partners, estimated at US$ 6.8 million. The national authorities and WHO have engaged several partners, including DFID, USAID, French Embassy, GIZ, and Africa CDC to support the plague outbreak response.

Partnership

- In support of the MOPH and the other national authorities, WHO and the GOARN partners have initiated deployment of emergency response teams. By 8 October 2017, 30 international experts (in various fields including leadership, epidemiology, data management, laboratory, case management, communication, resource mobilization, staff wellbeing, planning, logistics, and administration and finance) have been deployed; additional 12 experts are in the process of deployment. The WHO Country Office has also repurposed its 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 also have trade and travel link to Madagascar. These priority countries include South Africa, Mozambique, Tanzania, Mauritius, Comoros, Seychelles, and Reunion.
- Key readiness actions to be implemented in each priority countries, 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.
- WHO is supporting in-country prepositioning of equipment, medicine and supplies for plague management in high risk countries.

IHR Travel measures

- WHO and MOPH initiated exit screening of departing passengers at the International Airport.
- 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 based on the available information.
- International travellers should be informed about the current plague outbreak and that plague is endemic in Madagascar.
- WHO will being sending additional guidance note on international Health Regulation 2005 (IHR) for the high risk countries, to support preparedness and readiness activities at points of entry, especially airports and seaports.

3. Summary of public health risks, needs and gaps

The most critical needs at this stage include rapidly improving the national coordination mechanism by appointing a national coordinator with a dedicated team that will be working on full time on the response. This will maximize the impact of government and partners joint actions to stop the outbreak. There is an urgent need to establish appropriate isolation and treatment facilities, and scale up infection prevention and control measures. Risk communication and community engagement are critical. Ultimately, there is a need to strengthen epidemiological and entomological investigations in the country in order to target the high risk populations and areas, strengthen vector control and community engagement to reduce disease transmission. In addition, preparedness and readiness in neighbouring regions and countries, including at the points of entry, should be enhanced.

Proposed ways forward include: