Highlights

- The number of new notified cases have begun to decline following six weeks of intensive outbreak response by the Madagascar Government and partners to the dual epidemics of pneumonic and bubonic plague. While the number of patients decrease, 978 people have been cured, 122 are currently on treatment, and 113 deaths have been reported.

- Between 1 August and 27 October, a total of 1,554 cases have been notified, out of which 985 are pneumonic plague, 230 bubonic plague and 339 unknown. Out of these total reported cases, 332 cases are confirmed, 495 cases are probable and 727 cases suspected. It is noteworthy that only 27 per cent of pneumonic cases have been confirmed so far, while 34 per cent remaining probable and 35 per cent suspect. Considering the current situation and the fact that the plague season in Madagascar runs through April, continued vigilance of the response is required.

- Treatment and referral capacity, data management, contact tracing and communication and sensitization have been significantly reinforced. The current focus is on rumour management, addressing stigmatization, safe and respectful burial, and clarify diagnosis of very young children who are unable to go through regular testing.

- To facilitate the reopening of schools and the return to school for 415,000 children in affected areas, on November 6 (following the precautionary closure of schools on 2 October), UNICEF has been working with the Ministry of Education on plague detection and referral protocol and related special training for more than 15,000 teachers and administrative staff to ensure that children with symptoms are properly referred to treatment centres without causing stigmatization or panic.

- UNICEF’s support to the response, is focused on improving the health case management in treatment centres, including hygiene and wash provisions; facilitating food provision for patients and families in hospitals and a continuously evolving communication response aimed at sensitizing communities on the dangers of the epidemic; advice on how to prevent and access treatment, as well as address rumours; reduce stigma and facilitate work at community level (tracing, referral, burials).

SITUATION IN NUMBERS

Data as of 27 October

**1,554**

Total cases notified, of which 985 cases of pneumonic plague, 230 cases of bubonic plague and 339 unknown cases, notably in the urban areas of Tamatave and Antananarivo

**978**

Recoveries

**113**

Deaths reported

**40**

Out of 114 districts have been affected with the highest number of cases detected in the capital

Estimated required funding for UNICEF contribution to response

US$ 2.6 million
Situation Overview & Humanitarian Response

Madagascar is experiencing two concurrent outbreaks of plague: a flea-transmitted bubonic plague outbreak that has spread beyond the usual rural areas where the plague is endemic, into new rural, as well as urban areas; and a second highly-contagious human to human transmitted pneumonic plague outbreak which has been spreading rapidly predominantly in the three main urban areas of the country. The number of reported cases has been steadily rising although appears to have tapered somewhat in the past 10 days. To date, 1,554 cases have been reported and the number of deaths recently exceeded 100.

The response is now in place following intense work over the past few weeks on (1) developing the necessary technical protocols for this unprecedented situation, with WHO leading the epidemiological surveillance, treatment, contact and tracing part of this work and UNICEF leading protocol development for schools, WASH and C4D (including safe and culturally appropriate burials), and (2) setting up previously non-existent treatment and care services at hospitals including antibiotics provision, triage and isolation capacity set up, proper hygiene and waste disposal, training of staff amongst other activities. Nevertheless, several factors continue to make this dual epidemic outbreak very complex to manage:

- A steadily increasing demand to assist in setting up new treatment centres given the rapid overflow of existing hospitals and the emergence of the outbreak in new areas;
- The lack of capacity of some existing centres to provide adequate isolation and hygiene;
- Complexity of data systems, with an over-estimate of “suspected” cases, irregular or incomplete data coming from the peripheral level and a constantly evolving situation;
- Complexity of tracing contacts in urban, often informal, settings;
- False rumours causing panic and creating dangerous behaviours;
- Strong pressure on Ministry of Education to re-open schools.

UNICEF is supporting the national response alongside the Ministry of Health, World Health Organization (WHO), National Office for Disaster Prevention and Control (BNGRC), USAID, Government of France, Institut Pasteur, International Federation of the Red Cross, Medecins du Monde, Action contre la Faim and Médecins Sans Frontières (MSF). Significant surge capacity from these international organisations has arrived from abroad in recent weeks.

Humanitarian leadership and coordination

Given the scale and magnitude of the outbreak and the necessity for a multi-sectoral, integrated response, a Ministerial-level Steering Committee chaired by the Prime Minister has been set up and includes all ministries involved in the response to ensure strategic engagement and decision-making for multi-sectoral action. At the operational level, cross sectoral support by non-Health actors is being coordinated by the National Risk and Disaster Management Office.

The primary health plague response is coordinated by the Ministry of Public Health and WHO through a Central Crisis Cell. Under the Crisis Cell, five response committees (surveillance; case management; community response; social mobilization and communication; logistics) have been established to plan and implement the joint technical response. The committees, co-led by the Ministry of Health and partners, also include other line Ministries such as Ministries of Water & Hygiene, Education and Population, and international technical partners (WHO, UNICEF, French Cooperation, USAID, PSI, Medecins du Monde). Institut Pasteur Madagascar, a recognized global leader in plague response, is providing additional technical support for the response.

A joint coordination task force bringing together operational partners supporting the plague response meets daily, chaired by WHO. Health and WASH clusters meet regularly on a needs basis to move specific response elements forward. The Humanitarian Country Team has been convened to mobilize partners beyond the immediate health/WASH/communication elements and to review and endorse priorities for the Central Emergency Response Fund (CERF) proposal.

Response Strategy

While the four pillars of National Response Plan approved on October 4 remains the core consolidated document for Health response: (1) surveillance; (2) case management; (3) community response and (4) social mobilization and communication budgeted at USD 10 million, a more integrated response, based on no-regret policy (acting and accepting all support immediately), is being developed.

While initial efforts were dedicated to scale-up the existing system and to ensure massive communication, thus bringing the population to health centres, current efforts aim at reducing the incidence of the disease by reinforcing tracing, improving isolation and hygiene in hospitals, improving communication and rumour control and improving quality of care, including via food provision to patients and families.
UNICEF has been supporting the case management and community elements of the basic health response including key WASH elements. UNICEF has also been co-leading crucial sensitization and social mobilization communication of the population, including sensitive issues related to corpse disposal, and intensified support as the outbreak increased in magnitude. UNICEF’s field presence is facilitating the response in various location hotspots.

Summary Analysis of Programme Response

Health
The current plague outbreak would not have reached the current extent if health systems were stronger in Madagascar. The decline of the health system during the recent political crisis and related socio-economic decline contributed to a further weakening of the health system, especially at village level. The plague response will focus on addressing the most immediate emergency needs while also re-enforcing essential capacities to prevent further outbreaks.

Results to date:
• 1,850 Community Health Workers and 188 Health Centre supervisors have been trained in Greater Antananarivo for contact tracing and community response.
• UNICEF health staff are supporting the improvement of nine triage and treatment centres. To date, UNICEF has provided 23 tents, 50 beds, 220 body bags, protective gear and medicines for chemoprophylaxis for 4,900 adults and 1,700 children.
• Six logisticians trained on the management of drugs and medical equipment in the six main hospitals in Antananarivo are responding to case management. Efforts have focused on reinforcing stock management and distribution capacity based on UNICEF’s health system and supply management strengthening work in the regions and with Salama.
• Technical social mobilization support to contact tracing.

Communication for Development (C4D) and Communication
The C4D and Communication response initially focused on disseminating messages about plague identification and the required steps for suspect cases. As awareness has been raised, UNICEF is now focusing on improving free hotline capacity, designing community or social group specific messages, ensuring rumour-control and response and improving field capacity, while constantly updating messages, especially on sensitive issues. New child-friendly tools are being designed to support the back to school operation.

Results to date:
• UNICEF produced and field-tested public education materials (posters, brochures, radio/TV spots). 119,000 posters and brochures have been produced and distributed, including to partners in the Ministries of Transport and Tourism, Ministry of Industries and private sector development, church groups and other key influencers.
• UNICEF trained all 194 warden chiefs in Antananarivo for support to identification, facilitation and communication.
• Radio and TV spots aired on public and private TV and radio (every 15 minutes).
• UNICEF has mobilised a volunteer network capable of facilitating the dissemination of key messages: Through the Red Cross, more than 5,000 families have been reached in four regions; 900 church volunteers have been mobilized and carried out door to door sensitization in Antananarivo and Tamatave. An additional 400 volunteers were trained.
• Development of multi-layered strategy to support contact tracing, address stigmatisation and rumour-management.
• Daily monitoring and analysis of information, rumours and perceptions among the population through social media, TV, radio and newspapers. Daily recommendations given by the media monitoring unit.
• Meeting with four leaders of most popular churches to obtain their engagement in key message dissemination and stigma reduction.
In order to deal with the culturally sensitive issue of corpse disposal, a burial practice protocol has been finalized with major local consultations, and pre-tested this week. Reassurance that traditional burial practices can be observed should reduce the risk of non-declaration of deaths.

UNICEF supported trainings for media practitioners along with WHO, BNGRC and the Ministries of Health and Communication to sensitise journalists on the outbreak response.

UNICEF supported the local implementation of the communication component of the response in Atsinanana, Analamanga and Analanjiofo Regions.

A guide for private sector and companies to prevent and mitigate the outbreak was developed along with ILO, WHO and syndicates.

Three special sensitization meetings with private sector platforms were organized to ensure that businesses are aware and support relevant measures for their staff and to mobilize private sector support for the response.

**WASH and hygiene**

Improving the water, sanitation and hygiene (WASH) situation is a critical element of epidemic propagation control and WASH interventions are central to the case management and community response elements of the pneumonic plague response. Better sanitation is also essential to interrupting the bubonic plague epidemic as well as to providing treatment conditions that respect human dignity and avoid nosocomial transmission.

- **Results to date:** UNICEF undertook early assessments of six Antananarivo hospitals that are treating plague cases. As a result, water tanks have been installed in CHAPA hospital, which has also been reconnected to the water supply following repairs, and Anosiavaratra hospital is currently being reconnected. 20 latrine cubicles were installed in CHAPA and 20 more are underway for Anosiavaratra. A total of 41 handwashing facilities have been installed in three Antananarivo hospitals and soap and waste disposal units have been provided.
- Assessments of hospitals were also conducted outside in Tamatave and Fenerive Est. Two water tanks of 500 litres have been installed in PPH Toamasina Hospital in Tamatave with two more underway in CTTP Fenerive Est hospital. Additional latrines, incinerators and hand washing station and showers were provided to main hospitals. Soap, disinfectant gel, buckets, and waste disposal facilities have been provided.
- Further assessments were carried out in the cities of Antsirabe and Fianarantsoa, south of Antananarivo.
- 264 logisticians, hygienists, and cleaners are paid by UNICEF and are working in treatment centres. The logisticians are responsible for managing the supplies which treatment centres have received and hygienists are charged with maintaining standards for Infection Prevention and Control.
- Chlorine and tarpaulins have been supplied to the Ministries of Water and Education in Tana and in Atsinanana.
- The Ministry of Justice has requested materials and supplies for the disinfection and disinfestation of 46 prisons across the affected areas. UNICEF is responding to the request.

**EDUCATION**

Since schools present a significant risk for disease transmission, the Government temporarily closed the 1,800 schools in plague-affected areas to block transmission and to allow for flea spraying and removal. Schools are recognized as structures that can support the control of the epidemic, provided that appropriate measures can be put in place to facilitate this, and considering that (i) tracing is easy if school if access is controlled, (ii) identification of cases and orientation of cases is potentially easier than in engorged urban slums and (iii) sensitization about the epidemics through teachers and messages brought home by children/students has great potential to reinforce public awareness. Additional measures are underway to capacitate schools and teachers to prevent transmission among 450,000 school children in Antananarivo and Tamatave when public schools reopen after the planned holidays on 6 November.
Results to date:
- Since the closure of schools, UNICEF has supported the Ministry of National Education to carry out flea spraying and removal in 1,800 schools in affected areas.
- UNICEF has been working with the Ministry of National Education and with inputs from the Ministry of Public Health on the development of a special plague school protocol including screening and referral mechanisms, special teacher training, and special sensitization materials. The Communication for Development team helped finalize a communication plan this week for schools, including the delivery of 50,000 posters to schools in affected areas.
- UNICEF has trained a plague response team in the Ministry of Health, as well as directors from all 22 regions and all local education chiefs in Antananarivo. Over the next week, this training will be rolled out in 15 priority regions and a total of 16,000 schools (primary and secondary) will be reached. Priority schools – i.e. schools in affected urban areas - will also progressively receive equipment from UNICEF including thermometers, gloves and masks to be able to identify cases and relay them to nearest health centre.
- Private schools that reopened the week beginning 23 October received UNICEF support on following the newly established plague protocol.

**NUTRITION**
Lack of feeding at therapeutic centres has been identified as a potential cause for aggravation of the epidemics since patients might not be willing to come to centres offering no basic non-medical services and since caretakers may have to go through and out of the hospital to find food, thus spreading the disease. UNICEF, the National Office for Nutrition, BNGRC and the World Food Programme (WFP/PAM) are currently setting up a response plan in all plague treatment centres (beginning with Antananarivo) with prepared meals for patients and family members, in order to mitigate transmission from family members visiting their loved ones. It is expected that a response will begin in the coming week depending on the mobilization of resources.

**Funding Needs**
- The National Plague Response Plan, adapted to the current outbreak since the epidemic began, is budgeted at US$ 10 million, with immediate funding needs of US$ 6.5 million.
- Within the framework of the National Plague Response Plan, UNICEF urgently require US$ 2.6 million for the UNICEF-supported contributions to the overall response as outlined below.

<table>
<thead>
<tr>
<th>UNICEF FUNDING REQUIREMENTS</th>
<th>US$</th>
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<tr>
<td>Health response (supply, capacitation)</td>
<td>800,000</td>
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<tr>
<td>WASH response (supply, transport and staff in CTTP) – 3 months</td>
<td>600,000</td>
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<tr>
<td>School response (Prevention+ screening in schools) + Nutrition</td>
<td>500,000</td>
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<tr>
<td>Communication for Development (Sensitization of population)</td>
<td>400,000</td>
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<td>Human Resource outbreak response reinforcements</td>
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<td>Support and logistics</td>
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<td>Cross sectoral</td>
<td>34,500</td>
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<td>Recovery costs (7%)</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$2,600,000</strong></td>
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