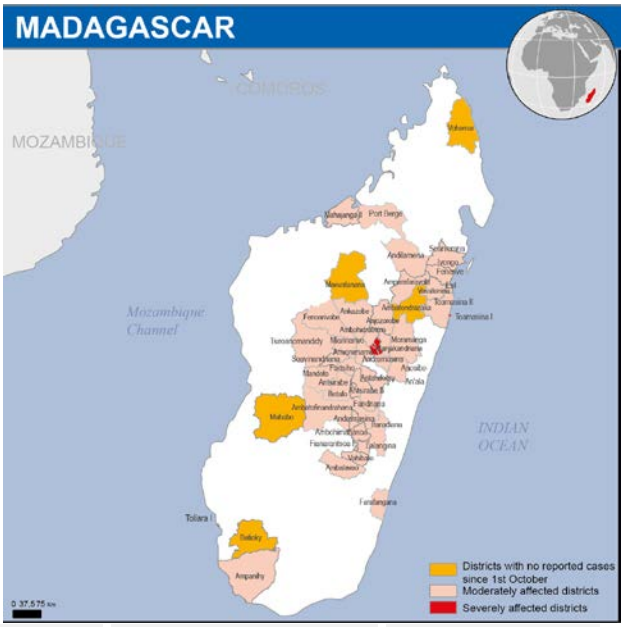
Madagascar: Plague Epidemic
Joint Situation Report No. 3, as of 23 October 2017

This report is published under the coordination of the National Office for Risk and Disaster Management (BNGRC), with input from all relevant Ministries and the Humanitarian Country Team, which includes the United Nations System in Madagascar. It covers the period until 23 October 2017.

Highlights

- 14/22 regions and 40/114 health districts have reported cases of pneumonic plague; 6 affected districts have not registered new cases for 15 days.
- 1,192 cases have been identified with 124 deaths; 67 per cent of cases were pneumonic.
- 780 patients have been cured since the beginning of this epidemic, others are receiving treatment in hospitals.
- Less than 30 per cent of people who had contact with patients can be traced.
- Plague has been reported long major highways; despite the lack protective equipment, controls are being strengthened.
- About 52 per cent of disinfection equipment needs are not yet covered.
- The private sector is increasingly involved, including the workers unions.



1,192	124	67%	780	<30%	26%
Total cases this plague season	Total plague deaths	Of cases were pneumonic	Patients have been cured since 1 August 2017	Of people who had contact with patients can be traced.	Of required funding received.

Situation overview

Although plague is endemic in Madagascar, this season has been uncharacteristic: it started a month early, has been predominately of the pneumonic form, and has most affected the largest urban centers of Madagascar (Antananarivo and Toamasina). Many of the districts currently affected have no experience of the disease, which represents another challenge in addition to the difficulties in controlling the epidemic in urban areas.

The total number of cases (1,192) is already three times higher than the average annual total (September to April). Medical and non-medical responses to pneumonic plague (as compared to the bubonic form) is challenging in urban environments due to population density and mass transit.

The capital Antananarivo, a transport and trade hub, has been most affected. The urban context increases the risks for health workers, and 54 medical staff have been infected to date. The epidemic is also started to have socio-economic repercussions.

Funding

As of October 19, only 26 per cent of the $9.5 million requested in the Joint Response Plan of Government and partners have been received. The funds received to date have been largely consumed.

WHO provided $1.5 million, UNICEF $600,000, IFRC $253,000, UNDP $200,000, UNFPA $331,000, and Italy $100,000. In-kind contributions were received from China

$9.5 million
required, of which $3 million has been raised

($200,000 in medicines) USAID ($18,000 of masks respirators, 100,000 simple masks, and 10 vehicles to support the operations of the Ministry of Public Health).

Contributions from the private sector are increasing. The Oilers Group donated $16,000 to the Plague Response Crisis Cell; Canal + offered free message broadcasting; DHL offered storage facilities; Ambatovy has donated personal protective equipment and other necessitates to strengthen the medical response; the Orange Solidarity of Madagascar Foundation and the BFV Bank - Société Générale have also contributed protective equipment.

Humanitarian Response

Health

Needs:

780
Plague patients who have completed treatment in since 1 August 2017

- The health infrastructure should be able to cope with the plague outbreaks.
- More detailed epidemiological data is need for to allocate resources optimally, such as number of cases being treated in hospitals.
- Communication needs to be tailored to specific groups, including churches, the private sector, prisons, health workers, teachers, children, pregnant women and home nurses.
- Personal protective equipment (PPE) is in short supply, and more doctors are needed. The Municipal Hygiene Office in Antananarivo does not have sufficient PPE for body removal. The Prison Service (PA) have warned of a serious lack of PPE and post-contact treatments
- PA is participating in working groups to raise awareness of the serious situation. Following consultations ICRC and UNICEF, the provision of PPE should be quickly resolved.
- Lack of food for hospitalized patients is one of the causes of them leaving the hospital. An inter-organizational initiative has been established to address this issue.
- There is a need to put in place an alert mechanism at the corporate level, especially for those employing thousands of people.

In more detail, the most urgent needs are:

- Monitoring equipment: infrared thermometers (6200 units) and laboratory equipment for rapid diagnostic tests (RDTs).
- Equipment for use in health centers: PPE (gloves, masks), disinfectants and waste management, sheets, screens and equipment for isolation centers.
- Treatment: prophylaxis, antibiotics.
- Logistics: including ambulances, generators, storage space, tents and banners.

Response

Commission for the Tracing of Contacts

- 1,800 community workers (CAs) were trained in Antananarivo by WHO, UNICEF and USAID, followed by 2,632 Cas in the other regions, reinforced by 340 supervisors.
- As of 17 October, 3,980 contacts have been traced and 3,236 followed up on (81.3 per cent). These were generated by 169 cases. Among the contacts, two were suspected cases in Antananarivo.
- As of 19 October, the tracing of contacts in Toamasina encountered a health concern as rumors spread of a plague vaccination campaign, which was officially denied by the Ministry of Public Health.

Surveillance Commission

- WHO and Institut Pasteur are supporting the DVSSE (Epidemic Surveillance Heath Department) in data management.
- Establishment of health inspection posts at international airports, with evaluations ongoing about strengthening of maritime border control points.
- Mobilization of the WHO IHR Geneva team for further guidance.
- Training of CAs and community leaders to research, detect and report deaths at community level.
- Reinforcement of overland sanitary control measures around Antananarivo by BNGRC and local authorities, as well as at aerodromes and ports, rivers and railways. The following Districts have already implemented these measures: Fénérive Est (Analanjirofo), Camp Robin (Upper Matsiatra), Vohidiala, Ambatondrazaka (Alaotra

Mangoro), Antsirabe I (Vakinakaratra), Ambanja (Diana); Ihosy (Ihorombe), Toamasina (Atsinanana), Sainte-Marie (Analanjirofo), Mahajanga (Boeny), Antananarivo (Analamnaga).
- Launch of a toll-free number 905 by TELMA for the Atsinanana Region.
- Several companies have implemented internal measures for prevention and case detection.

Cases management Commission

- Six treatment centers in Antananarivo are operational, a seventh will soon be ready after improving WASH conditions at a hospital.
- Six mobile clinics in Antananarivo transport patients to hospitals (with the support of USAID).
- Deployment of the teams to affected areas in support of the teams deployed by WHO and UNICEF: MSF in Tamatave; IFRC in Antananarivo; and ACF – Solidarity International in Antsirabe.
- Some NGOs are involved in reducing patient mobility and increasing the safety of patients sites.
- Support protocols have been updated and will now be tested in a treatment training center.
- Multi-partner training on infection prevention and control to reduce / avoid the infecting of medical personnel is ongoing.
- Case reference: the arrival of a team of SAMU coordinators (French Public Health) will help to organize the referral system in Antananarivo.
- A call line has been established which provides the option of emergency medical assistance.
- 264 hygienists paid by UNICEF have benne trained and will be assigned to the various hospitals.
- Triage protocol is in review, therefore the case definition would be reviewed.
- On burials, although a protocol has not been yet been formally validated, an agreement between WHO and the Malagasy Red Cross (CRM) has been signed for pre-testing: CRM will take be responsible for dignified and secure burial (PPE, burial in the presence of family). Training of trainers by CRM is ongoing, with the aim of 2,660 volunteers trained in 22 regions.
- Six treatment centers are being supported by WHO, UNICEF and IFRC, particularly on quarantining.
- UNFPA dispatched midwives and doctors, PPE, and emergency kits for
- maternal care in hospitals.
- Médecins Sans Frontières (MSF) is supporting the health response in hospitals in Toamasina.

Logistics Commission

- Shipments of PPE materials on Plague Treatment Centres (CTTPs) and districts in region by WHO and UNICEF.
- Support by UNICEF to improve the functioning of the operational cell by staffing computers, mobile phones and furniture within the MSP, donation of 23 tents for treatment centers (Toamasina-Tananarive), supply of 150 body bags adults and 64 children's mortuary bags distributed in affected regions, 300 M / Box of 100 gloves, 12,500 surgical masks, 400 masks, FFP2, 50 beds (for Tamatave), 3 IEHK emergency kits (for Tamatave).

WASH, Prevention and Control of Infections (CPI)

- Training of 50 participants on 19 October on CPI protocol
- Revision of the protocol for the opening of schools in collaboration with UNICEF and the Ministry of Education
- Formulation of recommendations following the visit to CHAPA (Centre Hospitalier Anti-Peste a Ambohiamandra) to follow working conditions
- Visit to Tamatave University Hospital in collaboration with MSF to discuss the patient circuit, and briefing health staff on standard precautions.
- Delivery of PPE for the 8 CTTP centers in Antananarivo, Tamatave and East Fenerive.
- Delivery of 50 garbage bins of 120 liters (Pediatrics Ambohimiandra, CHAPA, Befelatanana, Andohatapenaka, Tsaralalana Children's Hospital).
- Delivery of materials (70 buckets of 15l, 70 goblets, 12 boxes of soap, 32 DLM, 1200 posters) to the 6 CTTPs of Antananarivo.
- Construction of 9 new latrine boxes and 9 new shower cubicles in the PPH CTT Tamatave (7 boxes) and CTTP Fenerive Est (2 boxes).
- Improved connection and water pressure with JIRAMA (CTTP Ambohimiandra, CHAPA, PPH Tamatave, CTTP Fenerive East).
- Provision of tarpaulins (CHAPA, Anosiavaratra)
- Hiring of 198 hygienists, guards, launderers, coordinators and logistician in the 6 CTTPs and 70 in the CTTP Tamatave and Fenerive East.

Commission for Risk Communication, Community Engagement and Social Mobilization

- The development of communication strategies continues, but groups must still be better targeted.
- Preparations underway for the printing of protocols, brochures, posters, and key messages, and training of the crisis team team by UNICEF
- Development of a communication support plan for the tracing of contacts and the reduction of stigma.
- Awareness through local TV and radio stations and through mobile video units for the rural population, with the support of UNICEF and USAID.

Gaps and Constraints :

- An unknown number of tombs contain plague corpses following their theft and reburial.
- Safe and dignified burial: there is a risk of families opening the waterproof body bag as that the body can be in contact with the earth.
- The continued practice by some traditional healers to empty the buboes of puss leads to patient deaths and the increased risk of contagion.
- The relatively long duration of hospitalization of patients waiting for the result of the screening test. If the negative patients are detected earlier, more beds would be available. Work is ongoing with the IPM to reduce sample collection time.

Multisector

Needs:

- There is a need to establish guidelines for monitoring, alerting, case management and private sector precautions.
- There is an urgent need for infrared thermometers and PPE.
- Validation and formalization of the draft guidelines for health checks on national roads and railway stations.
- Adaptation to local contexts of messages
- Strengthening mass communication and outreach activities.
- Capacity development of existing local resources to increase the speed of interventions and increase the support of the target populations.
- Capitalization on the experiences of mobile cholera teams to respond to the plague challenge in an urban context.

Multi sectoral responses:

- **Education**: Classes will reopen once guidelines have been put in place by Ministry of National Education with the support of UNICEF and WHO. The availability of electronic thermometers must be ensured.

- **Protection**: The Ministry of Population, Social Protection and the Promotion of Woman provided psychosocial support to the sick and their families. It is working with BNGRC in inter-organizational efforts to distribute food to patients receiving treatment in public facilities.

- **Industry:** Increased awareness to encourage greater vigilance: employee temperature, isolation rooms in the workplace, awareness posters, business continuity planning, etc. Some United Nations agencies (ILO, UNICEF, WHO, OCHA) is providing support.

- **Justice and Prison Administration Sector**: while there have been no registered cases in prisons, it is vital to keep plague out of prisons. Prisons provide an extremely high population density (there are 13,000 prisoners in the 16 affected regions). Preventive measures and sensitization have started collaboration with the Ministry of Public Health. The Prison Service has compiled a detailed request on its needs, such as PPE, exterminating rats, and training personnel in case management and tracing. ICRC and UNICEF are supporting by strengthening prison medical teams.

- **Tourism:** In the Ihorombe region (a major tourist destination), local authorities established a crisis unit and awareness and sanitation activities were carried out at the level of tourism operators and municipalities in this region.

- **Tourism and Transport:** discussions are currently underway with Air Madagascar to reinforce the information provided to tourists traveling by plane around the country. UNICEF support should result in the availability of airline brochures on proper behavior.

- **Telecommunications:** the survey report conducted by the BNGRC and some members of the civil society on the functionality of the number 910 emergency hotline, highlighted the difficulty of reaching the right interlocutor

at the end of the line as sometimes people were obliged, already exhausted, to call the 118 of the Fire Brigade Corps (CSP) of the Urban Commune of Antananarivo (AUC). The report invited the members of the telecommunication sector to improve the quality of services that are offered by operators of this call service by training call agents and procuring additional equipment.

- **Transportation:** At least 5 Districts have established health checkpoints since the middle of this week. On the recommendation of the leaders supporting the management of the crisis, the BNGRC deployed the checkpoints along the following highways: RN7: Vakinakaratra - Amoron'Imania - High Mahatsiatra; RN1: Itasy and Bongolava; RN4: Betsiboka – Boeny; RN2 - RN5: Atsinanana – Analanjirofo. These health checkpoints have been put in place using local resources pending the formalization of the draft protocol already finalized by the working group composed by the Ministry of Transport and Meteorology, the BNGRC, the Central Directorate of Military Health Service (DCSSM), the Civil Protection Corps (CPC), the Gendarmerie and the National Police. Feedback from MINSAP is anticipated and it is hoped that WHO will also provide some advice on how improve this protocol. Discussions between IOM and the BNGRC are also expected to will also refine the content of the final document.

- **Communication:** Technical preparations for the organization of a meeting with the press officers at the national level have been finalized and await the validation by all relevant stakeholders.

- **Security and Defense:** The involvement of the Security and Defense Force agents in the operations supporting the response activities against the plague epidemic continues with an increasingly visible and justified presence at the level of health checkpoints installed on national highways and at the entrance and exit of Districts and Regions that have recorded cases. They are sometimes commended by the members of other sectors for the reinforcement their security in the zones of proven insecurity as well as the zones where the population are reluctant to adhere to the control actions needed to curb the plague outbreak.

- **Water and Energy:** The actors of this sector made a special effort to restore the normal electricity supply of the city of Mahajanga as soon as possible. This electricity supply had been interrupted since the beginning of the week by malfunctions of the thermal generators powering the various localities of the Boeny Region. This situation has, for a time, resulted in load shedding to address the problem and has resulted in additional logistical costs in hospitals and health facilities as well as in the offices of the local administration that host the crisis unit. Fortunately, these facilities are equipped with generators so they can remain operational during electricity cuts.

- **Environment:** Representatives of the Ministry of Environment and Forests and the rescue engineers of the CPC participated in the training on "forest fires - controlled fires - tactical fires", provided by experts from French civil security. It is part of the contribution to efforts to curb the practice of uncontrolled "Tavy" (slash-and-burn agriculture). This practice can cause repeated bush fires and the cause of deforestation in several areas of the island. This in turn promotes a flight of rats from their natural habitat and their arrival in villages or cities, thus increasing the risk of a plague epidemic.

Gaps & Constraints:

- Some disinfection products used in the food industry is not up to food grade.
- The control system in workplaces of different sectors is not standardized
- Sectors supporting health responses are not among the priorities for donations of specific protection equipment (PPE, for example). This situation slows down interventions and the prompt implications of actors such as security actors or relief for colleagues in the health sector.
- Patients are still escaping from hospitals because they don’t believe their diagnosis and deny the reality of their illnesses, especially in regional areas.
- Some authorities and stakeholders at District and Regional have expressed their frustration about not having sufficient resources to deal with the epidemic

Coordination

The current coordination structure is consistent with the one already designated in the national contingency plan related to major epidemics and pandemics.

All health responses are led by the Ministry of Public Health, co-led by the WHO and supported by the actors directly involved in health issues. The health sector is organized into four committees: (i) surveillance, (ii) community response, (iii) case management, and (v) communication. The logistics commission acts in a cross-cutting manner.

The Health Cluster, which brings together Government partners, provides operational support and coordinates the health response. The Ministry of Health has its own crisis management unit, to respond; this cell has daily meetings with the Ministry and all the various committees are presented in this crisis management unit.

Because of the direct or indirect involvement of other sectors in this response, BNGRC has been mandated to ensure cross-sectoral response coordination as decided by the Prime Minister in consultation with the Ministers concerned. Each sector is represented within this inter-sectoral strategic coordination group and meets daily. If necessary, the Prime Minister chairs a highly level meeting to determine strategic directions of responses. In a similar way, the Country Humanitarian Team, chaired by the Resident Coordinator of the United Nations System, also meets for the strategic coordination with its partners.

At the subnational level, five teams of experts composed of WHO Geneva and Brazzaville, CDC of Atlanta, Canada and Africa, and the English Public Health Service, were deployed in five zones (Antananarivo, Toamasina, Majunga, Fianarantsoa, Fenerive Est) to reinforce the response. BNGRC will join these teams to ensure coordination of responses and will UNDP support these deployments using logistical support and the establishment of crisis management centres in these areas. In all, more than 100 personnel have been deployed to affected regions.

Contact and names of BNGRC staff deployed to support field coordination.

Name	Mobile phone	E-mail	Areas of deployment
ROVA NAIVOMANANA Lucia	261 34 99 704 77	romsjoseph1@gmail.com	Axe Miarinarivo Tsiroanomandidy
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RAZAFIARISON Jean Jugus	261 34 13 921 69	rjugus@gmail.com	Axe Toamasina, Fenerive Est

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For more information, please visit www.bngrc-mid.mg, www.reliefweb.int, http://reliefweb.int/country/mdg, www.humanitarianresponse.info/en/operations/madagascar

MADAGASCAR: Plague Outbreak

as of 23 October 2017

OCHA

KEY FIGURES

1,192 Cases of plague

67% Pneumonic cases

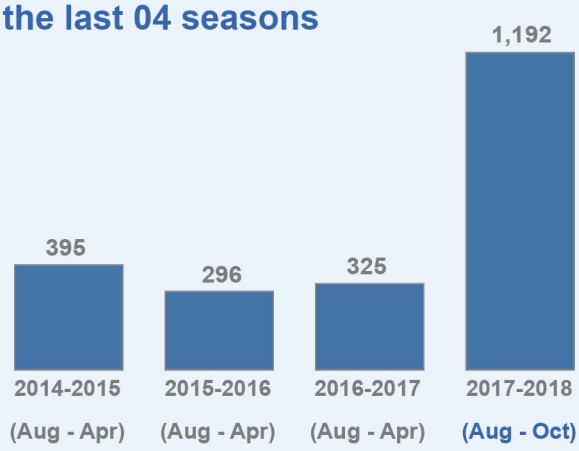
124 Deaths

50 Affected districts

OVERVIEW

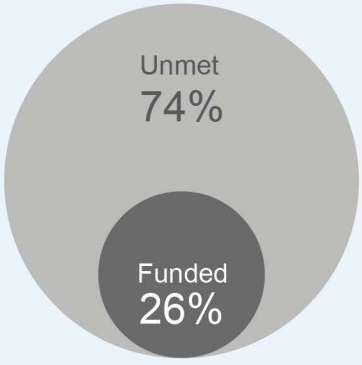
Madagascar records between **300 and 600** cases of plague during the annual August-to-April plague season. This year, plague outbreaks have been much more widespread, with pneumonic plague (as opposed to the bubonic form) affecting non-endemic urban areas. Since August 2017, a total of **1,192** cases have been reported, the majority pneumonic (**67%**), with **124** deaths. About **55 per cent** of these cases have been recorded in the capital Antananarivo and Toamasina, the two largest cities in the country. The national contingency plan has been fully activated, and a national operation plan is in place, which includes health and critical services. The World Health Organization (WHO) maintains its **grade 2** internal emergency classification.

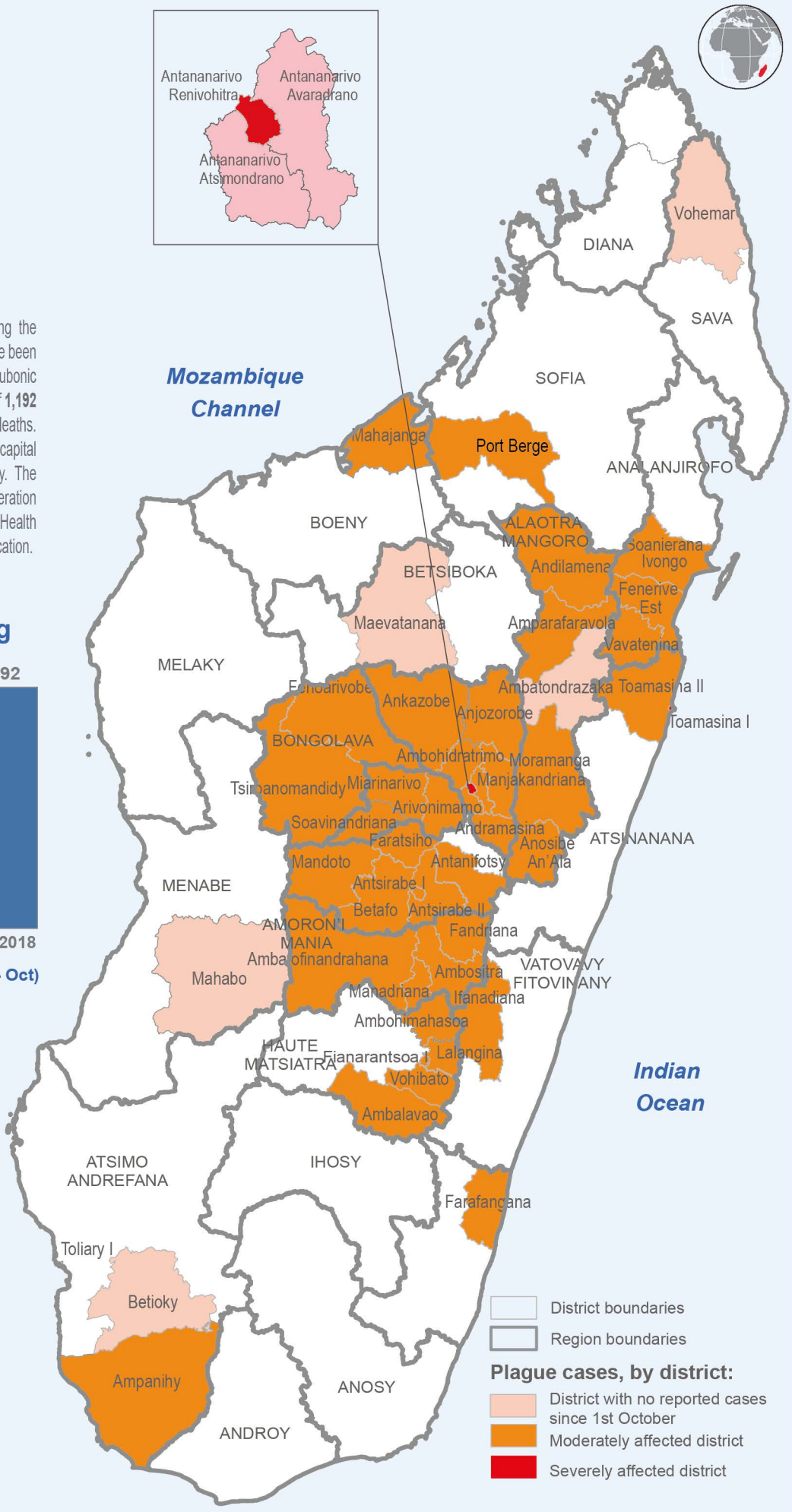
Evolution of the epidemic during the last 04 seasons



FUNDING

US$ **9,5 million** requested





The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations

Creation date: 23 October 2017 **Map No:** 904v03VA **Sources:** Humanitarian partnerrs, Ministry of Health, WHO, IPM

Feedback: www.reliefweb.int http://rosa.humanitarianresponse.info

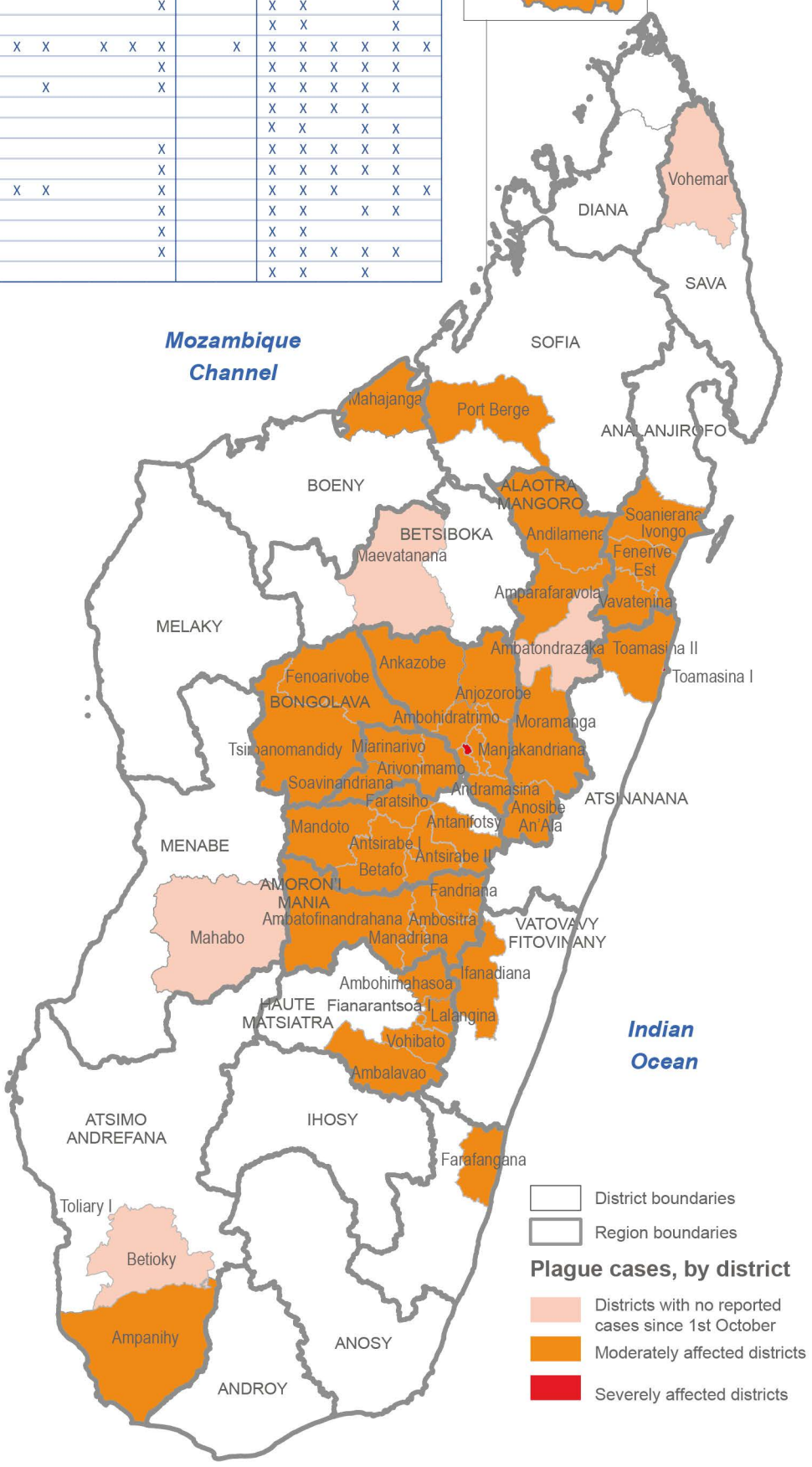
MADAGASCAR : Plague outbreak response

As of 23 October 2017

OCHA

Activities by cluster, by region

REGION	EDUCATION		PROTECTION	HEALTH																			
				COMMUNICATION				HYGIENE AND SANITATION							LOGISTICS		HEALTH CARE AND SURVEILLANCE						
Alaotra Mangoro	X	X	X		X	X	X	X						X			X	X		X	X	X	
Amoron'I Mania		X	X		X	X	X	X						X			X	X	X	X	X		
Analamanga	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Analanjirofo		X	X		X	X	X	X					X	X			X	X	X	X	X	X	
Atsimo Andrafana					X	X	X	X						X			X	X			X		
Atsimo Atsinanana					X	X	X	X						X			X	X			X		
Atsinanana	X		X		X	X	X	X	X	X		X	X	X		X	X	X	X	X	X	X	
Betsiboka			X		X	X	X	X						X			X	X	X	X	X		
Boeny	X	X	X		X	X	X	X		X				X			X	X	X	X	X		
Bongolava			X		X	X	X	X									X	X	X	X			
Diana					X	X	X	X									X	X		X	X		
Haute Matsiatra	X	X	X		X	X	X	X						X			X	X	X	X	X		
Itasy		X	X		X	X	X	X						X			X	X	X	X	X		
Menabe					X	X	X	X	X	X				X			X	X	X		X	X	
SAVA			X		X	X	X	X						X			X	X		X	X		
Sofia					X	X	X	X						X			X	X					
Vakinankaratra			X		X	X	X	X						X			X	X	X	X	X		
Vatovavy			X		X	X	X	X									X	X		X			



Legend

EDUCATION

- Disinfection, disinfestation
- Development and supply of communication tools (posters, booklet, etc.)

HEALTH

Communication

- Press release to journalists
- Development and supply of communication tools (posters, booklet, etc.)
- Support plan for contact tracing and to reduce stigmatization
- Sensitization on plague outbreak (symptoms, control and prevention)

Hygiene

- Disinfection, disinfestation
- Supply of refuse container
- Provision of provisional latrine
- Provision of water treatment and disinfecting products
- Supply of soap and hand washing device
- Promotion of hygiene and sanitation

Logistics

- Equipment for telecommunication (phone, computer)
- Vehicle allocation / provision for case evacuation

Health care and surveillance

- Case management
- Contact Tracing
- Deployment of staff in the field
- Health control Sanitary controls at the entrance and exit of cities (land, air, rail, river and sea)
- Supply of drugs, kits and medical devices
- Tent and tarpaulin (for sorting, treatment and health care center)

PROTECTION

- Orientation, referencing and psychosocial support

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