

Updates on situation of drug-resistant tuberculosis in Papua New Guinea, with special emphasis on Daru Island

This document is a copy of the statement issued by WHO Representative Office in Papua New Guinea. The document can be accessed at: http://www.wpro.who.int/papuanewguinea/areas/tb_leprosy/daru_update/en/

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Background

Tuberculosis (TB) remains a major public health threat in Papua New Guinea. TB kills more people in Papua New Guinea than any other infectious disease. The problem is further compounded by high levels of drug resistant TB particularly in hot-spot areas¹, namely Daru of South Fly District in the Western Province^{2,3}, the National Capital District and the Gulf province⁴.

Recognising the serious problem with drug resistant TB in Papua New Guinea, the Government of Papua New Guinea in coordination with all partners established an emergency response team (ERT) in August 2014. The ERT assists in raising high-level advocacy, resource mobilization, planning and monitoring of implementation of the national response to drug-resistant TB. Subsequently, an accelerated response plan was developed in January 2015 and the government and partners have been further increasing their efforts to address the issue. As part of continued support for the country's effort, the Western Pacific Regional Green Light Committee (rGLC) conducted its annual mission to Papua New Guinea in May 2015 and made a series of recommendations. The rGLC is a group of international TB experts to support public health response to address drug-resistant TB across the Western Pacific Region. Although the next rGLC mission is planned later this year, significant progress has already been observed.

The purpose of this document is to provide an update on the progress made since May 2015 and WHO's position to further support country's efforts.

Progress since the rGLC mission to Papua New Guinea in May 2015

With substantial efforts of the central and local governments, local health workers and engaged communities, supported by international and local partners, significant progress has been observed, particularly improvements in diagnosis, treatment and care for patients with drug-resistant TB in Daru.

- **Increasing funding:** The Government of Papua New Guinea has committed funding to implement the accelerated response plan to address MDR-TB and released 8 million Kina (equivalent to US\$ 2.6 million) in January 2016. The Australian Government continues to provide significant financial support
- **Improving patient support while on treatment:** To ensure all patients successfully complete their treatment, community-based treatment teams, the Daru Accelerated Response for Tuberculosis (DART), have been established. Patients can receive treatment close to home and also nutritional support through a daily lunch for every visit.
- **Organizing care around individual patient needs:** Weekly individual care planning meetings have been instituted in Daru General Hospital with a focus on delivering patient-centred care.
- **Improving access to essential medicines to treat drug-resistant TB:** The government procures all second-line TB medicines and medicines to treat side effects. These are available to patients with drug-resistant TB free of charge.

- **Expanding access to a new medicine:** Building on the experience in the compassionate use of bedaquiline since 2013, the National TB programme introduced a procedure for access to bedaquiline for patients required the drug. Currently, six patients (five in Daru and one in Port Moresby) are treated with a regimen containing bedaquiline. Expanded access to novel TB drugs can be critical for curing patients when an effective treatment regimen cannot be designed with existing medicines.
- **More patients successfully treated:** Since June 2015, only 3% of patients discontinued treatment within six months after initiating MDR-TB treatment, compared to more than 60% of patients were lost to follow up previously. This indicates improvement in patient education and support as well as better clinical care including management of adverse side effects.
- **More patients diagnosed with TB and MDR-TB at an earlier stage of the disease:** Diagnosis of patients with drug-resistant TB is significantly improving due to expanded use of a rapid diagnostic technology (Xpert MTB/RIF), active contact tracing and international collaboration with offshore laboratories. In 2015, 120 patients were diagnosed with drug-resistant TB (43% increase from 2014) and all of these patients were enrolled for treatment.
- **Improving in-country diagnostic capacity:** The National TB Reference Laboratory in the Central Public Health Laboratory, Port Moresby developed its capacity to conduct culture and drug susceptibility testing, which was previously only possible by offshore reference laboratories.
- **Preventing transmission:** Infection prevention and control have been strengthened through administrative, mechanical and personal protective measures. The hospital management developed its infection control plan, introduced a cough triage centre, assigned an infection control focal person and regularly monitors use of protective equipment by health care staff in the MDR-TB ward.
- **Updating policies to further strengthen the services:** To build on these improvements, the Department of Health 's National TB Program has released its updated approaches to further strengthen the TB services in Daru in the following four areas (National TB Programme Directives issued on 18 March 2016):
 1. Patients can start treatment for MDR-TB on an outpatient basis without requiring hospitalization according to the conditions and preference of patients
 2. Trained community health workers can supervise and support treatment of patients with MDR-TB care in the community
 3. A new diagnostic technology, Xpert MTB/RIF, can be used to diagnose all people who are presumed to have active TB
 4. The use of a new drug, bedaquiline, is expanded.

WHO position on the progress and the updated approaches

- WHO supports the new approaches of the National TB Programme on MDR-TB treatment on an outpatient basis as well as community-based care and support that is close to patient homes.
- WHO supports the use of Xpert MTB/RIF as the initial diagnostic test for TB diagnosis as per global WHO policy guidance⁵.

- WHO advises that the use of new drugs should be further extended to ensure that all patients who are eligible for treatment are provided with adequate treatment regimens that include new drugs when necessary. Specifically, WHO recommends that:
 - a. the use of bedaquiline should be extended to include all MDR-TB patients for whom a conventional regimen cannot be designed, as per current interim WHO policy guidance; and
 - b. delamanid should be included according to current interim WHO policy guidance.
- WHO supports continued monitoring of TB service delivery to ensure that adherence to treatment (with patient support) is maintained, treatment response and drug safety are continuously measured and promptly addressed, and barriers to scale-up of treatment are removed quickly.
- WHO supports the acceleration of proactive approaches for case detection and prevention such as preventive therapy⁶ and infection control at household and community levels.
- WHO recommends extending these additional policies to the whole country in a stepwise manner and as soon as possible.
- WHO welcomes the progress to date, and is committed to providing continued support to Papua New Guinea and stakeholders for TB control and to maintain the emergency response to MDR-TB in hot spot areas including Daru.

¹ Aia P, Kal M, Lavu E, et al. The Burden of Drug-Resistant Tuberculosis in Papua New Guinea: Results of a Large Population-Based Survey. *PLoS ONE* 2016;11(3).

² Simpson G, Coulter C, Weston J, et al. Resistance patterns of multidrug-resistant TB in Western Province, Papua New Guinea. *Int. J. Tuberc. Lung Dis* 2011; 15:551–552.

³ Gilpin CM, Simpson G, Vincent S, et al. Evidence of primary transmission of multidrug-resistant TB in the Western Province of Papua New Guinea. *Med. J. Aust* 2008; 188:148–152.

⁴ Cross GB, Coles K, Nikpour M, et al.: TB incidence and characteristics in the remote gulf province of Papua New Guinea: a prospective study. *BMC Infect Dis* 2014; 14:93.

⁵ Xpert MTB/RIF system for the diagnosis of pulmonary and extrapulmonary TB in adults and children: policy update. WHO/HTM/TB/2013.16, Geneva, World Health Organization 2013

⁶ Guidelines on the management of latent tuberculosis infection, Geneva, World Health Organization. 2015