

# Papua New Guinea

World Vision

Health and human wellbeing



**Australian Government**

**AusAID**

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# Papua New Guinea

## Health and human wellbeing

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### Video chapters online

1. Papua New Guinea: a country profile	(3' 20'')
2. HIV and AIDS in PNG	(3' 51'')
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4. Tuberculosis in PNG	(3' 47'')
5. Water-based diseases in PNG	(3' 03'')

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# Papua New Guinea

## Health and human wellbeing

### Papua New Guinea: human wellbeing

#### Unit scenario

“Geographies of human wellbeing focuses on investigating global, national and local differences in human wellbeing between places. This unit examines the different concepts and measures of human wellbeing, and the causes of global differences in these measures between countries ... They explore programs designed to reduce the gap between differences in wellbeing.”

This unit is a case study using an enquiry-based approach to explore human wellbeing, health and disease in Papua New Guinea. It invites students to work in small groups with the following scenario:

- “You are workers with an Australian aid and development non-government organisation (NGO) and have been invited to work with the PNG Government to help improve health outcomes for the people of PNG. Before starting your research, spend time brainstorming all you know about Papua New Guinea and make a list of questions to guide your research. Make sure these questions address social, economic and environmental issues.”

**Skills: observing, questioning and planning**

- “Watch the PNG country profile video without audio. What further questions does this raise about life in PNG and the health issues facing the people of PNG? Watch the PNG country profile with audio and read the PNG country profile. State your hypothesis regarding patterns, impacts and efforts to address health issues in PNG.”
- “Watch the other video chapters on **HIV and AIDS, Nutrition, Tuberculosis** and **Water-based diseases** – and read the documentation on these topics. Undertake further research and collect data. Watch the AusAID in PNG video below.”

[https://www.youtube.com/v/p6JvlzTMK5E?version=3&f=videos&app=youtube\\_gdata&rel=0](https://www.youtube.com/v/p6JvlzTMK5E?version=3&f=videos&app=youtube_gdata&rel=0)

**Skills: collecting, recording, evaluating and representing**

- “Analyse the data to make generalisations and propose explanations for patterns and predict outcomes. You may need to confirm, reject and/or modify your hypothesis. What is being done and what could be done by groups, NGOs and governments to limit the impact of these diseases on development?”

**Skills: interpreting, analysing and concluding**

- “Make a series of recommendations to improve the health and human wellbeing of people in PNG – and communicate your recommendations to the PNG and Australian governments. Propose individual and collective action in response to this challenge, taking account of environmental, economic and social considerations; and explain the predicted outcomes and consequences of your proposal.”

**Skills: communicating, reflecting and responding**

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## Health and human wellbeing

### Tuberculosis in PNG

Tuberculosis (TB) is one of the oldest known diseases. It is a communicable disease caused by bacteria affecting the lungs, and it spreads from one person to another through the air. Today, the disease has essentially been eradicated in the Western world. However, it continues to impact millions of people in the developing world. TB is both preventable and curable.

#### How is it transmitted?

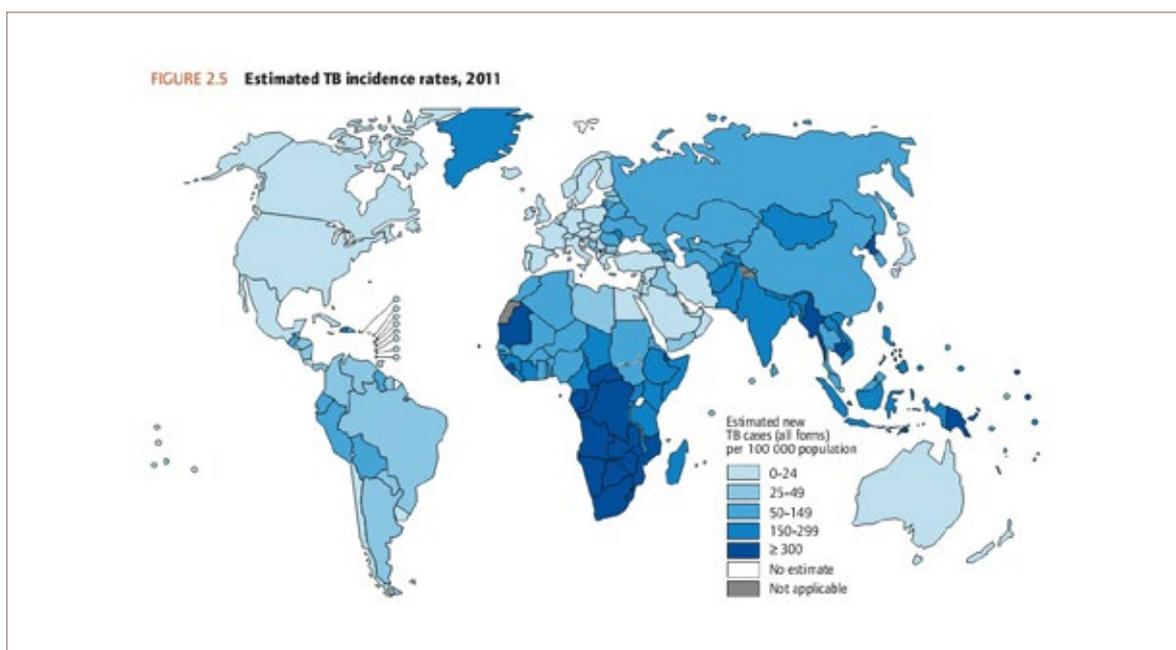
It is estimated that over 90 percent of the population in the developing world carry the TB bacteria. Most of these people do not catch the disease; their TB is dormant or latent. When the bacteria are dormant the disease cannot spread. However, the disease can become active in people with weak immune systems, for example those who are sick, malnourished or living with HIV and AIDS. Once active, the person is contagious and can spread the disease. Left untreated, each person with active TB will infect, on average, between 10 and 15 people every year.

TB is transmitted when an infectious person coughs, sneezes or spits. This propels the TB germ or bacteria into the air and it may be inhaled by others. Only a small amount of bacteria needs to be inhaled for a person to catch the disease.

#### What are the symptoms?

Symptoms of active TB are coughing, sometimes with blood, chest pains, weakness, weight loss, fever and night sweats. As it is a disease that spreads through the air, TB flourishes in overcrowded areas, with limited sanitation, infrastructure and ventilation. It is often referred to as a disease of the poor.

### Map of tuberculosis incidence rates, 2011



Source: World Health Organization, Global Tuberculosis Report 2012 [who.int/tb/publications/global\\_report/gtbr12\\_main.pdf](http://who.int/tb/publications/global_report/gtbr12_main.pdf)

# Papua New Guinea

## Health and human wellbeing

### Tuberculosis in PNG

#### What is the prevalence?

TB occurs in every part of the world. However, over 95 percent of TB deaths occur in low- and middle-income countries, and it is among the top three causes of death for women aged 15 to 44 years. In 2011, the largest number of new TB cases occurred in Asia, which accounted for 60 percent of new cases (WHO, 2012).

One of the greatest challenges to the global control of TB is the HIV epidemic. In 2011, nine percent of all new TB cases in adults were due to HIV infection. There were an estimated 1.8 million deaths from TB and 12 percent were due to HIV. Therefore, prevention of HIV and TB requires a focused effort to control both diseases in areas of high HIV prevalence.

Multi-drug resistant TB (MDR-TB) is a form of TB present in virtually all countries. This type of TB is caused by the inappropriate or incorrect use of anti-TB drugs. In 2011, there were an estimated 630,000 people with MDR-TB.

In PNG, TB is particularly prominent, with over 435 in every 100,000 people suffering from the disease. It is one of PNG's leading causes of death. Many people believe that TB is caused by sorcery. This means those infected may turn to the local witchdoctor or sorcerer for help instead of trained health workers. By the time some TB patients arrive at a health clinic, it's too late for medical treatment to work. Many people die because of this misinformation.

#### Additional information

- Symptoms and spread of tuberculosis (Khan Academy YouTube – 12' 24")  
[youtube.com/watch?v=CSWrrhWdsKU](https://www.youtube.com/watch?v=CSWrrhWdsKU)
- Interaction of HIV and TB (Khan Academy YouTube – 8' 57")  
[youtube.com/watch?v=S8s-g7KZR50](https://www.youtube.com/watch?v=S8s-g7KZR50)
- \* **WATCH** the Tuberculosis in PNG video (3' 47") at  
[worldvision.com.au/schoolresources](http://worldvision.com.au/schoolresources)

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## Health and human wellbeing

### Responding to tuberculosis in PNG

The World Health Organization (WHO) developed the Stop TB Strategy in 2006 to provide focus for the global response to TB. PNG's national Stop TB Strategy is coordinated by the PNG Government with support from PNG's development partners.



Dotsy, TB DOTS mascot, at a World TB Day event in Port Moresby.

#### DOTS – Directly Observed Treatment Short-course

The preferred method for treating TB is known as DOTS (Directly Observed Treatment Short-course). Launched by WHO in 1995, the aim of DOTS is to ensure TB patients complete the full six months of antibiotics treatment. A trained patient supporter watches the patient take their medication, and in some programs the patient supporter actually provides the patient with their medication. The medication is provided for free in PNG.

The DOTS method allows patients to be treated in their home community rather than having to stay in hospital. This makes it cheaper, and allows patients to keep leading normal lives. It also means that patients are more likely to finish their course of treatment and

so reduces their chances of developing multi-drug resistant TB, which is harder and more expensive to treat.

World Vision's TB program trains people to be patient supporters and educates the community about TB. The program uses a mascot called Dotsy to increase community awareness about TB and how DOTS works. For example, during 2013 World TB Day activities, Dotsy and World Vision staff visited schools around Port Moresby to educate students and demonstrate the process of receiving DOTS. They reached nearly 12,000 students, who were encouraged to go home and talk to their families about what they had learnt.

#### Stop TB in Western Province Program

Poverty and PNG's rugged landscape make providing and accessing health services difficult. In the Western Province, people in very remote communities have struggled to access health services for TB diagnosis and receive a full course of treatment. As a result incidence rates of TB and multi-drug resistant TB (MDR-TB) were increasing<sup>8</sup>.

"AusAID has committed \$32.9 million over seven years to help support the Government of PNG to improve health services in Western Province, including detecting and treating TB<sup>9</sup>." This funding includes the renovation of Daru Hospital, the provision of new medical equipment, and training for additional community health workers and volunteer patient supporters. The funding also provides specialist TB staff and a sea ambulance to transport patients, deliver medicines, and bring medical staff to remote communities along the coast.

The program is showing signs of success, with MDR-TB mortality rates reduced from 25 percent to 5 percent in just one year<sup>10</sup>. Future challenges include the need to continue to expand TB control measures throughout all of Western Province, and ensure the sustainability of health services.

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### Responding to tuberculosis in PNG

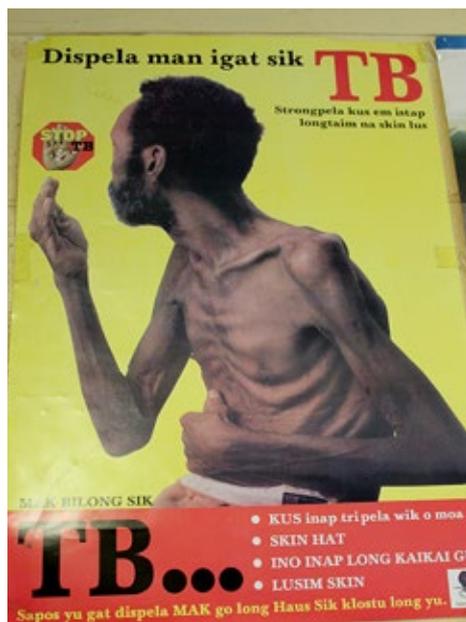
#### The Global Fund to Fight AIDS, Tuberculosis and Malaria

The Global Fund is an international institution that provides funding for large-scale prevention and treatment programs that address life-threatening diseases like TB. It is a public-private partnership that includes UN agencies, aid agencies like AusAID, the private sector and civil society organisations. Australia provides financial support to Global Fund programs through AusAID.

Worldwide, the Global Fund provides around 80 percent of international funding for TB programs<sup>1</sup>. In PNG, the Global Fund is supporting the government's national TB management efforts. Initially, US\$28.2 million was provided for programs running between 2007 and 2014. In June 2013, the Global Fund granted PNG an additional US\$9.5 million to extend the funding for the National TB Program<sup>2</sup>.

#### Additional reading

- PNG under strain to tackle drug resistant tuberculosis  
[abc.net.au/news/2013-06-19/an-png-under-strain-to-tackle-drug-resistant-tuberculosis-infec/4766896](http://abc.net.au/news/2013-06-19/an-png-under-strain-to-tackle-drug-resistant-tuberculosis-infec/4766896)
- New isolation ward boosts the fight against TB in PNG  
[aid.dfat.gov.au/LatestNews/Pages/New-isolation-ward-boosts-the-fight-against-TB-in-PNG.aspx](http://aid.dfat.gov.au/LatestNews/Pages/New-isolation-ward-boosts-the-fight-against-TB-in-PNG.aspx)
- Stop TB in my lifetime  
[aid.dfat.gov.au/LatestNews/Pages/Stop-TB-in-my-lifetime-Australian-Ambassador-for-TB-joins-PNG-commemorations.aspx](http://aid.dfat.gov.au/LatestNews/Pages/Stop-TB-in-my-lifetime-Australian-Ambassador-for-TB-joins-PNG-commemorations.aspx)



An example of a poster raising awareness about TB.



Participants in the 2013 World TB Day walkathon, Port Moresby.