

# Health and human wellbeing





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# Health and human wellbeing

### Contents

Unit scenario	
Papua New Guinea: a country profile	2-4
HIV and AIDS	5-6
Responding to HIV and AIDS in PNG	7-8
Nutrition, child and maternal health	9-10
Responding to nutrition, child and maternal health in PNG	11-12
Tuberculosis	3- 4
Responding to tuberculosis in PNG	15-16
Water-based diseases	17-18
Responding to water-based diseases in PNG	19-20
Further information and sources	21-22

#### Video chapters online

١.	Papua New Guinea: a country profile	(3' 20'')
2.	HIV and AIDS in PNG	(3' 51'')
3.	Nutrition: child and maternal health in PNG	(5' 02'')
4.	Tuberculosis in PNG	(3' 47'')
5.	Water-based diseases in PNG	(3' 03'')

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### 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

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

### Health and human wellbeing

# Nutrition, child and maternal health in PNG

Globally, the number of children dying each year under the age of five has fallen from 12 million to fewer than 7 million in the past two decades – a dramatic 42 percent reduction. However, there is still a long way to go. In 2011, 4.4 million children died from conditions which are preventable or treatable: pneumonia, diarrhoea, malaria, birth complications and newborn infections.

Poor diet is the underlying cause of death for an estimated 3 million<sup>4</sup> children every year. Lack of nutrition weakens a child's immune system placing them at much greater risk of contracting a preventable disease. Poor nutrition also means they have less strength to fight and recover from disease. Long-term lack of nutrition, especially in the early years of life, leads to growth stunting.

Women make up just over half the world's population but over 60% of the world's hungry people

#### Stunting

Globally, about one in four children under five years old is stunted. However, in PNG the prevalence of stunting is 48.2 percent (50 percent in rural areas and 35.3 percent in urban areas)<sup>5</sup>.

Stunting is measured by low height for age. It indicates chronic under-nutrition during the most critical periods of growth and development in early life. Stunting and other forms of under-nutrition reduce a child's chance of survival. It also hinders optimal health and growth. Stunting impacts

brain development, which is likely to have long-lasting harmful consequences for cognitive ability, school performance and future earnings.

#### First 1,000 days

From a life-cycle perspective, meeting a child's nutritional requirements is most crucial in the first 1,000 days of life, including the period of pregnancy and ending with the child's second birthday. During this time, the child has increased nutritional needs to support rapid growth and development, is more susceptible to infections, and is totally dependent on others for nutrition, care and social interactions.

Less than 40% of babies in the developing world are exclusively breastfed

In all regions of the world, children living in rural areas and children in the poorest 20% of households are more likely to be stunted

### Health and human wellbeing

# Nutrition, child and maternal health in PNG

#### Food, health and care

The nutritional status of children is influenced by four broad factors: food, health, care and home environment. Firstly, ideal nutritional status can be reached when children have access to affordable, diverse and nutrient-rich food. This includes exclusive breast milk for the first six months of life.

Secondly, a child's nutritional status also depends on receiving appropriate maternal and childcare. The mother's nutrition and health status during pregnancy and after birth is also important for the child's development. An undernourished mother is more likely to give birth to a stunted child. Exclusive breastfeeding in the first six months is also crucial.

I million babies' lives could be saved if all mothers were encouraged and supported to exclusively breastfed for the first 6 months of life Thirdly, children also require adequate health services provided by trained healthcare staff. In PNG, there is one doctor for every 17,068 people, compared to one doctor for every 302 people in Australia. Nearly 90 percent of PNG's doctors are based in urban areas, but nearly 90 percent of the population lives in rural areas. In PNG, there is approximately one nurse



A woman is measured during an antenatal care visit at a rural health clinic.

for every 2,270 people. In Australia, there is one nurse for every 100 people (World Bank, 2010).

Finally, children and mothers also need a healthy home environment including safe water, sanitation and good hygiene practices. These factors directly influence nutrient intake and the presence of disease. The interaction between under-nutrition and infection creates a potentially lethal cycle of worsening illness and deteriorating nutritional status. In PNG, only 39 percent of the population has access to safe drinking water.

### Additional reading

- Under-nutrition and stunting who.int/nutgrowthdb/about/introduction/en/ index2.html
- WATCH the Nutrition, child and maternal health in PNG video (5' 02'') at worldvision.com.au/schoolresources

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## Responding to nutrition, child and maternal health in PNG

Actions that can improve maternal and child health include<sup>6</sup>:

- immunisations;
- clean water, improved sanitation and good hygiene;
- education for family and community members on illness prevention and treatment;
- greater access to healthcare services, especially skilled attendants during pregnancy and childbirth;
- immediate and exclusive breastfeeding of newborns until at least six months of age;
- education about and improved access to nutrition; and
- providing micronutrient supplements, for example Vitamin A, zinc, iron and iodine.

#### Training midwives

Australia, through AusAID, is providing funding for midwife training in PNG. The aim is to assist in expanding PNG's health workforce, making it easier for women to access skilled medical care during pregnancy and childbirth.

Between 2012 and 2015, scholarships will be provided for up to 500 trainee midwives. This is hoped to increase the number of births supervised by a skilled birth attendant by 8,000 each year<sup>7</sup>. AusAID is also supporting the ongoing training of existing nurses and midwives.



Two of Susie's children enjoy a nutritious snack.

#### Improving nutrition, child and maternal health

World Vision supports agricultural programs to increase the availability of nutritious food, as well as nutrition education programs. These programs are particularly focused on the needs of mothers and children, but can include all members of the community.

#### Madang Nutrition for Healthy Children Project

The Madang Nutrition for Healthy Children project is run in villages across the Madang Province in partnership with local communities.

Projects like this can be challenging as they can confront traditional beliefs and behaviours. For example, project participant Susie noted, "A lot of women thought colostrums were dangerous. They were encouraged to apply warm water and extract [the] colostrums. It was a cultural practice done for generations." Colostrum is the first breast milk produced by mothers of newborns. In fact, it is rich in antibodies and nutrients making it very important for helping infants to stay healthy.

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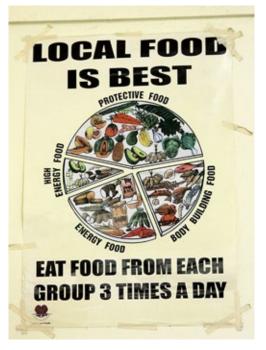
# Responding to nutrition, child and maternal health in PNG

#### Madang Nutrition for Healthy Children Project continued from previous page ...

The project educates community members about the frequency of meals and the types of food children need to be healthy, as well as the importance of healthy eating habits during pregnancy. Talking about what she had learnt and how it had changed her behaviour, Susie said that she now fed her three-year-old daughter three times a day rather than twice a day, and gave her more protein-rich food. She also ate more herself, and found that both she and her children had more energy as a result. "Lynette used to cry a lot, and wasn't that playful. Lynette has changed a lot, she is more energised."

### Additional reading

- Papua New Guinea: Tackling maternal health "crisis"
   irinnews.org/report/94352/papua-new-guinea-tackling-maternal-health-crisis
- Tackling PNG's appalling infant and maternal death rate radioaustralia.net.au/international/radio/program/pacific-beat/tackling-pngs-appalling-infant-andmaternal-death-rate/1128120
- Australia joins global partnership to combat malnutrition aid.dfat.gov.au/LatestNews/Pages/Australia-joins-global-partnership-to-combat-malnutrition.aspx



An example of a PNG information poster about food groups and healthy eating.



A participant prepares her presentation on nutrition at a Mother and Child Health Peer Education training workshop.