

World Vision  
*Alive at Five: The Silent Global  
Crisis of Child Deaths*

World Vision



ACGC   
Alberta Council for Global Cooperation



# Alive at Five

## The Silent Global Crisis of Child Deaths

A multi-literacy, multi-media resource for grades 7 to 10.

Modules support outcomes in language arts, mathematics, social studies, media studies, communications technology, arts, health and science



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# Alive at Five

## The Silent Global Crisis of Child Deaths

In the time it takes to read this sentence, a child under the age of five will die. That child likely lived in a developing country and died from causes that were preventable or treatable. The odds are good this child was malnourished and born to a sick or malnourished mother as well. The medicines and health interventions he or she needed are available, but only for select populations. This child will be mourned by family and friends, but in the rest of the world this death will go unnoticed, because every four seconds the same story repeats.

### Note to Educators

*Alive at Five* is a multi-literacy, multi-media approach to studying an important and current global issue. Students will explore the topic of global child health and survival while developing media, technological, oral, written, visual, kinesthetic and numerical literacy skills.

This resource provides tools and activities supporting curricular outcomes in language arts, mathematics, social studies, media studies, communications technology, dramatic and visual arts, and health sciences. The activities are best used with grades 7 through 10, but are easily adapted to other grade levels or less formal learning groups or settings.

The modules are designed to address differentiated learning styles by including stand-alone lessons, a multi-literacy approach, the utilization of technological tools, increasing complexity in thinking skills, and a variety of strategies for building student knowledge and constructing responses. Some evaluation tools are included, but teachers are encouraged to use their own formative and summative evaluation strategies.

Icons at the start of each module identify literacies addressed in the activities. Please refer to the key below:



**Please note:** This resource includes links to various websites that access online tools and extend background information for teachers. World Vision Canada does not guarantee the content of these websites as they are subject to change, nor should the content of these websites be understood to reflect World Vision's values.

## Alive at Five

### The Silent Global Crisis of Child Deaths (cont'd)

#### With this resource students will...

- Understand and draw meaning from various types of texts
- Research information from various sources
- Critically analyze media messages for bias, trustworthiness and relevancy
- Create graphs and use data management to interpret patterns in mathematical relationships
- Produce reflective writing, perform orally and create artwork
- Use multimedia technology and appropriate conventions and techniques to create a media production
- Work constructively in groups and use effective listening and communication skills
- Understand factors impacting global child survival and the importance of health interventions in the first five years of life

#### Supporting Youth Voice and Action

Developing attitudes and skills to engage with global issues requires opportunities to acquire new information, develop understanding and empathy, and critically reflect on the issues. These skills are developed over time and through a variety of approaches.

*Alive at Five* helps students think critically about the topic of child health and survival, while encouraging constructive expression of their opinions. Use the modules, extension activities and recommended resources in *Alive at Five* to build the attitudes and skills students need to exercise meaningful local and global citizenship actions.

# Alive at Five

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# Global Child Survival:

## An Overview

In the year 2000, leaders of the world's wealthiest nations – including Canada – made a commitment to the world's children. They promised that by the year 2015, two thirds fewer children would die from preventable causes than in 1990 (Millennium Development Goal 4). Currently, we are not on track to keep that promise.

Every day, more than 24,000 children die before reaching their fifth birthday. Most of these children live in developing countries and die from causes that are preventable or treatable.

The main identified causes of death are: pneumonia, diarrheal diseases, pre-term births, asphyxia and malaria.<sup>1</sup> In 35 to 50% of these deaths, malnutrition is an underlying factor.

Many factors make it difficult to reduce child mortality. Lesser-developed countries struggle with inadequate health services, lack of clean water and sanitation, illiteracy (especially among women and girls), gender discrimination, and isolation of communities due to poor infrastructure, natural disasters and conflict.<sup>2</sup>

### Neonatal and Maternal Health

A significant proportion of under-five child deaths occur in the newborn period, the first 28 days of life. Of an estimated 8.8 million deaths of children under five in 2008, more than 40 per cent occurred in the newborn period. That is more than 2 million children dying the day they are born, and another two million in the first month.<sup>3</sup>

While some countries have seen improvement in reduction of infant deaths, the slow progress in other regions, such as sub-Saharan Africa, is of great concern. This is due to many factors, one being the challenge of improving the health of mothers. Currently, of the eight Millennium Development Goals (MDGs), it is Goal 5, improving maternal health, which is least realized. It is widely accepted that we will not achieve MDG Goal 4, reducing child mortality, without also addressing maternal health.

### Addressing the Problem

Preventing the deaths of millions of children requires an integrated approach and low-cost interventions such as: nutrition training; distribution of Vitamin A, iodized salt, and iron; education in breastfeeding, hygiene and sanitation practices; birth spacing and skilled birth attendants; access to antibiotics and immunizations; oral rehydration therapy (ORT); and ready-to-use therapeutic foods (RUTFs). Changes are also needed to improve healthcare facilities and systems, remove social barriers for women, and address indirect factors, such as illiteracy, that cause poor health.

World Vision takes a community-based multi-sector approach to improving child health. Nutrition and health are linked with agriculture, water and sanitation, household food security and education to ensure greater reach and impact.<sup>4</sup>

### The Millennium Development Goals

In September 2000, at the largest ever gathering of world leaders, 189 United Nations member countries endorsed the Millennium Declaration. This Declaration led to the adoption of eight major development goals to reduce poverty, hunger, and ill-health, and tackle gender inequality, lack of education, lack of access to clean water and environmental degradation by the year 2015. These eight goals are known as the Millennium Development Goals (MDGs).

<http://www.un.org/millenniumgoals/>

<sup>1</sup> World Vision Canada, 2009.

<sup>2</sup> UNICEF, Child Survival: A Global Challenge, [http://youth.unicefusa.org/assets/pdf/teachunicef-youthreporhighschool\\_final.pdf](http://youth.unicefusa.org/assets/pdf/teachunicef-youthreporhighschool_final.pdf) (2008).

<sup>3</sup> The Lancet: Press Release. "Mixed Progress in Reducing World Under-5 Mortality, with Most Regions Not on Track to Meet Millennium Development Goal 4." September 10, 2009.

<sup>4</sup> Peterson, Anne., "Impatient for Revolution", Global Future, Monrovia: World Vision, 2007.

# Alive at Five

## Millennium Development Goals - An Overview

### The G8 Summit: Opportunity for Action

2015 is the target year for achieving the eight Millennium Development Goals. As 2010 approaches, we reach a critical point in efforts to realize a two-thirds reduction in child mortality. The G8 Summit in June 2010, and the United Nations MDG review meetings in September 2010, will stir debate on development topics. With Canada acting as the Chair of the G8 Summit in 2010, World Vision Canada is working with partner NGOs to influence Canadian leaders into making child health a priority agenda item at this international gathering. For more information on World Vision's child health campaign, visit [Fivefor5.ca](http://Fivefor5.ca)



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lack  
infant  
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survival  
goals  
bias  
strategies  
literacy  
tools  
mortality  
development  
lottery  
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health  
see  
disease  
resource  
technology  
access  
facts  
role  
poverty  
five  
problems  
reduce  
leaders  
resigned

# Module 1

## Module 1: Understanding the Basics

Social Studies, Health, Science, Dramatic Arts



Oral



Written



Visual



Kinesthetic

### Students will:

- Use visual, spatial, kinesthetic, listening and critical thinking skills
- Draw meaning from various texts and work constructively in groups
- Compare the health of children in Canada to those in other countries
- Understand factors contributing to the health and well-being of children
- Investigate low cost and effective solutions to under-five child mortality

### Module 1

- Opening Challenges (25 mins)
- Activity 1: Survive to Five (45 mins)
- Activity 2: Understanding Problems and Solutions (75 mins)
- Supplementary Materials: *Leader's Script*, *Role Play Cards* and *Fact Sheets*

## Activity 1: Survive to Five: The Birth Lottery

### Materials

- *Survive to Five Leader's Script* (p. 15), string or tape, paper and markers, world map or globe, red, green and yellow dot stickers
- Class set of *Survive to Five Role Play Cards* (Supplementary Materials, pp. 57-60)
- Download and photocopy a class set of *What Rights?*<sup>5</sup> and *Born Lucky? Then pay for it*<sup>6</sup> (see Extension)

### Opening Challenge

Ask students to brainstorm in pairs the most important things a child needs to be healthy. List these as the “ingredients” of a healthy child. Award points out of 100 to each ingredient based on its importance (the greater the importance, the more points). The list should add up to 100.

*Math extension:* Create a pie graph to represent the percentages of each ingredient out of 100.

Join pairs into groups of four to develop a consensus on the five most important ingredients. Groups share findings with the whole class, which votes on the top five most important ingredients.

*Discussion:* Was it easy or difficult to prioritize the ingredients? How was consensus achieved?

<sup>5</sup> UNICEF, *What Rights?* [www.unicef.org/magic/media/documents/what\\_rights\\_flyer\\_english.pdf](http://www.unicef.org/magic/media/documents/what_rights_flyer_english.pdf) (2009).

<sup>6</sup> Kelly, C., “Born Lucky? Then pay for it”, [thestar.com](http://thestar.com), May 2, 2009.

# Module 1

## Instructions

Introduce the *Survive to Five* role play by telling students there are eight main factors (see *Leader's Script*, p. 15) impacting the odds of children living to the age of five, the critical age for ensuring their chance to reach adulthood.

In this activity they will see the global disparities in child health in 24 different countries, including Canada, and the obstacles children and families in developing countries face in accessing basic rights to health care, food, water and education. They will also understand that child survival depends on the countries in which they are born: if they are lucky, and win the “birth lottery” by being born in developed countries, their chances of survival are almost guaranteed.

- 1) Locate a large open playing area. Using tape or string, mark a “Start Line” across the middle of the area long enough for all participants to stand on in a single row. From the start line, walk 15 steps forward and mark another line across the play area, parallel to the start line. This line represents “Healthy at Five”, or the best odds of survival to the age of five. Walk 15 steps back from the start line and mark a third parallel line across the play area. This is the “Death at Five” line, representing the lowest odds of survival to the age of five. NOTE: Use a standard measurement to represent a single step.
- 2) Using paper and markers, create a heading sign for each of the eight *Factors Affecting Child Survival* (see *Survive to Five Leader's Script*, p. 15). Copy the script for each factor, cut out, and paste to the back of the heading signs.
- 3) Ask players to listen carefully while an introduction is read from the *Survive to Five Leader's Script*. They should close their eyes and visualize the scenario being described.
- 4) Players open their eyes. Hand out a *Survive to Five Role Play Card* to each one. Instruct them to read the card carefully, choose one of the children's names (male or female) and keep their identity and country secret.
- 5) Players line up in a single row facing the “Healthy at Five” line.

### Rx for Survival: games and role plays

#### Disease Warriors: Zap

Play this game to understand how vaccines work to protect against infectious disease. (Find Zap on page 3 of Disease Warriors).

[http://www.pbs.org/wgbh/rxforsurvival/series/teachers/pdf/rx\\_guide\\_diseasewarriors.pdf](http://www.pbs.org/wgbh/rxforsurvival/series/teachers/pdf/rx_guide_diseasewarriors.pdf)

#### Getting Your Money's Worth

This game shows how a country's average life expectancy and infant mortality rate relate to its healthcare spending.

[http://www.pbs.org/wgbh/rxforsurvival/campaign/givetime/pdf/Rx\\_Getting\\_Money\\_Worth.pdf](http://www.pbs.org/wgbh/rxforsurvival/campaign/givetime/pdf/Rx_Getting_Money_Worth.pdf)

#### Delivering the Goods

Explore the difficulties aid organizations face in getting medical care to people who need it by developing a plan for delivering a flu vaccine to citizens of a remote town.

[http://www.pbs.org/wgbh/rxforsurvival/series/teachers/pdf/rx\\_guide\\_deliveringgoods.pdf](http://www.pbs.org/wgbh/rxforsurvival/series/teachers/pdf/rx_guide_deliveringgoods.pdf)

# Module 1

- 6) Hold up a heading sign for the first factor in child survival, Birth Weight. Read aloud the script on the back of the sign and instructions for moving forward or backward. Closing their eyes while the script is read will encourage players to visualize and stay in role.
- 7) Repeat step 6 for the remaining seven factors, proceeding in the order listed. After each factor is completed, post the heading signs where they can be seen.
- 8) Once all eight factors have been read out, players will be located somewhere between the “Healthy at Five” and “Death at Five” lines. Instruct them to stay in their positions and read out their countries and role-play names to the group.

## Discuss

- What did you see happening in this activity? How did that make you feel?
- What surprised you the most during this activity?
- Name the biggest health challenge for your role-play child in his/her country.
- What message would you send to children standing at or near the lines farthest away from you?

## Extensions

- 1) Distribute coloured dot stickers to players: green stickers to those closest to the “Healthy at Five” line; red stickers to those closest to “Death at Five”; yellow stickers to all others. Ask players to place stickers on their role-play countries on a world map or globe. What patterns are there in the placement of the coloured stickers on the map? Why do you think these patterns exist?
- 2) Refer to the UNICEF pamphlet *What Rights?* on the UN Convention on the Rights of the Child (UNCRC). Which rights can be categorized as survival rights? Which ones did your role-play child not have protected? Are all these rights protected for children in Canada?
- 3) Examine the concept of the birthright lottery. Read the article *Born Lucky? Then pay for it.* Explain the concept of a *global levy*. Debate whether Canada and other wealthy nations should participate in this idea.

## Activity 2 Understanding Problems and Solutions

### Materials

- Access to computers and Internet (optional)
- Class set of *Fact Sheets* (pp. 51-56)
- Seven header signs with one of the following causes of under-five mortality on the front and the associated percentage on the back:

Neonatal Causes – 37%

Diarrheal Diseases – 17%

Measles – 4%

Malnutrition underlies 35 – 50% of all deaths<sup>7</sup>

Pneumonia – 19%

Malaria – 8%

AIDS – 3%

### Opening Challenge

Ask students to individually brainstorm seven to 10 main causes of death for children under the age of five around the world. Arrange answers in a *word cloud* (see text box). The text size of each idea reflects its importance, so the more they think children die from that cause, the larger the text should be. Post all the word clouds for students to see.

#### What is a Word Cloud?

A *word cloud* – also called a *tag cloud* or *weighted list* – is a visual collection of a list of words that describe a theme or idea. The importance or popularity of a single word or tag is represented by its size in the list.

See <http://www.wordle.net/> for examples.

*Discuss:* Which ideas are common? Any ideas you had not thought of? Which ones would you like to know more about?

Choose six student volunteers. Give each of them one of six prepared signs: pneumonia, malaria, AIDS, diarrheal diseases, measles, and neonatal causes. Line them up facing the class with the headings on the signs facing out. Use the *Fact Sheets* to briefly describe each direct cause of child mortality.

The class provides suggestions for ordering the six students into a line ranking them from the least cause of child mortality to the greatest. Once an order is agreed upon, the volunteers turn the signs around to reveal the corresponding percentages. Re-order the line-up if necessary.

*Discuss:* How did your ideas about the causes of child mortality compare with the actual causes? What do most of these causes have in common? (They are preventable.)

Choose another student volunteer to hold the malnutrition sign with the percentage facing in. Explain that malnutrition is both a direct cause and an underlying factor (or indirect

<sup>7</sup> UNICEF, Childinfo: Child Mortality Progress, [http://www.childinfo.org/mortality\\_progress.html](http://www.childinfo.org/mortality_progress.html), Sept 2009.

# Module 1

cause) in under-five deaths because it decreases immune system health. Ask students to guess what percentage of child deaths might be attributable to malnutrition. Reveal the answer.

## Instructions

Explore some of the direct and indirect causes of child mortality in more detail using the *Fact Sheets* (pp. 51-56) and one or more of the suggested activities (see *Using the Fact Sheets* text box).

After students have worked with the fact sheets, discuss the links between the different causes and interventions. Create a class mind map to show the connections visually.

*Note:* pneumonia, malaria and diarrheal diseases are direct causes of child mortality, while water and sanitation and maternal health are indirect factors. Malnutrition is considered both a direct cause and an indirect factor. In cases of severe acute malnutrition it can lead to death, but malnutrition also makes children more susceptible to deadly diseases like pneumonia and diarrhea.

## Discuss

- Discuss the connections between the direct and indirect causes of child mortality.
- What interventions or solutions exist to tackle the complexities of improving child survival? Can you think of others? Who is responsible for implementing these solutions?

## Using the Fact Sheets

### Summarize and clarify

Pairs of students read a fact sheet. One partner verbally summarizes the contents to the other without reading from the sheet. The other partner then clarifies what was heard by repeating the information. The summarizer corrects anything that was missed or misinterpreted.

### KWL Stations

Create charts with the headings: “What I Know”, “What I Want to Know”, and “What I Learned”. Students rotate in six small groups through fact sheet stations. Before moving to a new station they fill in the first two columns for that fact sheet and fill in the third after reading and discussing the Think and Debate questions. Each group contributes to a collective response on one of the fact sheets for presentation to the class.

### Expert groups

Students work in groups to become experts on one of the fact sheet topics. New groups are formed with one member from each expert group. Each expert teaches the others in the group about their topic.

### Debates

Debate the questions from the fact sheets by researching pro and con arguments and hosting a formal debate.

### Wordles

Visit [www.wordle.net](http://www.wordle.net) to create word clouds using text from the fact sheet. Students print and post the word clouds for a “walk past”, noting which ideas are emphasized most in each fact sheet and why.

# Module 1

## Extensions

- 1) Explore techniques used in effective public health ad campaigns. Refer to the *Design Your Own Health Campaign* resource listed in *Further Resources* (p. 65). Design a public health ad campaign around one of the issues from the fact sheets.
- 2) Respond to the following quotations in informal discussions or formal debates, within the context of the issue of child health and survival:
  - i) *Only the educated are free.* ~ Epictetus (Greek philosopher)
  - ii) *It is poverty to decide that a child must die so that you may live as you wish.*  
~ Mother Theresa
  - iii) *Millions of children are dying because they are poor, forgotten or just unlucky enough to be born in the wrong place.* ~ David Morley (Save the Children Canada)
  - iv) *Children are the world's most valuable resource and its best hope for the future.*  
~ John F. Kennedy (35th US President)



# Survive to Five Leader's Script

## Role Play Introduction

You are about to play a game of survival. In this game, you are a child under the age of five in a country somewhere in the world. In your country, you may be lucky. There is good health care for children, you've been vaccinated for protection against preventable diseases, your parents have jobs, and you go to school. On the other hand, you might not be so lucky in the "birth lottery." In the country where you were born, children die for reasons linked to poverty, such as malnutrition and diseases like pneumonia, malaria, and AIDS. Nutritious food is in short supply, there is poor access to medical care, your parents are unemployed and children die every day.

Your goal in this game is to survive to your fifth birthday. Each of you will get a country identity card and a name. Read your card carefully and keep it private. Based on what is written there, you will be instructed to take steps forward towards good health and survival, or steps back towards illness and possible death. Let's begin.

## Factors Affecting Child Survival

Cut out each factor and attach to the back of a sign naming the factor on the front. Read aloud in order:

### 1. Birth Weight

In many developing countries, pregnant women don't get the extra food or special health care needed to deliver healthy weight babies. A child born underweight may remain stunted all her life, and give birth to underweight babies herself. Children who cannot reach a healthy weight are stunted and struggle to develop. They have weaker immune systems, putting them at risk for infections and serious illness. Underweight children can also have lowered brain function and learning difficulties in school.

**Take one step forward if your birth weight was above 2500 g (5.5 lbs); take one step back if it was below.**

### 2. Health Care

In Canada, everyone has access to free health care, no matter your age or how much money you have. Children get free vaccinations to guard against preventable diseases such as measles or polio. However, in many countries there are obstacles to accessing health care. Medical clinics may be far away and people cannot pay the travel costs to get there. Drugs may be too expensive or not even available to buy. Sometimes visiting a doctor is less important than harvesting crops and feeding families. All these barriers mean children may not get free, life-saving vaccinations, and sick or malnourished children may go without proper medical care.

**Take one step forward if you had your vaccinations; take one step back if you did not.**

**Take one step forward if a health clinic is in your community; take one step back if it is far away.**

# Survive to Five Leader's Script

## 3. Food

Proper nutrition is one of the most important factors for good health. In Canada most children can access an abundance of high quality food, but many children in developing countries eat only one or two meals a day and sometimes go days without eating. Even if children get regular meals they can be undernourished if their diet is mainly made up of filler carbohydrates such as rice, corn or cassava. Malnourished children lacking in protein, vitamins and minerals are susceptible to wasting and death from preventable diseases. Children have a much better chance of survival if their mothers exclusively breastfeed until six months of age. From six months to two years of age, high quality food and proper feeding practices are essential to survival and good health later on in life.

**Take two steps forward if you get three meals a day; take two steps back if you do not.**

**Take one step forward if your diet includes protein; take one step back if your diet is mainly carbohydrates.**

**Take one step forward if you were exclusively breastfed as an infant; take one step back if you were not.**

## 4. Water and Sanitation

Canada is blessed with an abundance of fresh, renewable water sources and good public sewer systems. However, large numbers of people around the world do not have access to safe and clean water, toilets or water treatment systems. The water they drink contains dangerous parasites and bacteria that cause disease and diarrhea in children. Untreated diarrheal disease leads to dehydration and is a leading cause of death in children under five.

**Take one step forward if you have access to clean water; take one step back if you do not.**

**Take one step forward if there is a toilet in or near your home; take one step back if there is not.**

## 5. Education

Free public education systems, like those in Canada, provide access to schooling for all children. But for many children worldwide, school is not an option. If their parents do not have money to pay school fees, children may have to work or stay home to help with chores. Educated children are more likely to be healthy and get good jobs in the future. They are also safer from abuse than those who work or live on the streets. Girls are often kept out of school to help with younger siblings at home while their brothers go to school. This has a negative future impact because educated mothers know about proper food preparation, how to care for themselves during pregnancy, and how to access health care, so are able to raise healthier children.

**Take one step forward if you attend school; take one step back if you do not.**

**Take two steps back if you are a girl and not in school.**

**Take one step forward if your mother is educated; take one step back if she is not.**

## Survive to Five Leader's Script

### 6. Malaria

Malaria is a serious and sometimes fatal disease transmitted by certain types of mosquitoes carrying the plasmodium parasite. It is a leading cause of death worldwide. Although we have many mosquitoes in Canada, none of them carry the malaria parasite. Malaria symptoms include fever, headache and vomiting. Left untreated, it can kill. It is estimated that a child dies every 30 seconds from malaria. Mosquito bed nets treated with insecticides are cheap to produce and are the most effective way of preventing malaria, but in many countries where malaria is a problem less than half of children under the age of five sleep under a treated bed net.

**Take one step forward if you live in an area without malaria; take one step back if you live in an area that has it.  
Take one step forward if you need a bed net and have one.**

### 7. HIV and AIDS

The Human Immunodeficiency Virus, or HIV, causes AIDS, a fatal disease of the immune system that affects more than 33 million people worldwide. The rate of AIDS in Canada is very low, but in some countries is as high as one in every four adults. There is no cure for AIDS, but life-saving anti-retroviral drugs exist that can control it. In Canada, people with AIDS get these drugs for free, but for many people in developing countries these drugs are either not available or difficult to get. Many children have been orphaned because one or both of their parents died from AIDS. Some infants are infected by their mothers during childbirth. Children who have lost their mothers are 10 times more likely to die themselves.

**Take one step forward if both your parents are alive; take one step back if one or both of your parents have died.  
Take one more step back if your mother has died.**

### 8. Employment

Parents who work can pay the costs of raising healthy children. This includes paying for nutritious food, medical costs, dental care and schooling. Children of unemployed parents may get poorer quality food and little access to health care. They are also more likely to be working to bring money into the family or to pay for their own school fees. Children who are not in school are more vulnerable to working in unsafe and unhealthy conditions, such as scavenging in garbage dumps.

**Take one step forward if one parent has a job; take two steps forward if they both do.  
Take one step back if one parent is unemployed; take two steps back if they both are.  
Take one more step back if you or your siblings must work instead.**

# Module 2

## Module 2: Child Health in the News

Language Arts, Media Studies, Communications Technology



Oral



Written



Visual



Media

### Students will:

- Identify bias and value judgments and explore the ways bias appears in the news
- Critically respond to and evaluate various types of media
- Use appropriate conventions and techniques to create a media release
- Design and participate in a mock news conference

### Module 2

- Activity 1: Understanding Bias (100 mins)
- Activity 2: Examining Media Coverage of Global Child Health (50 mins)
- Activity 3: Filling the Gap Press Conference (150 mins)
- Supplementary Materials: *Student Handouts: Analyzing Media Messages* and *Global Child Health in the Media; Fact Sheets*

## Activity 1: Understanding Bias

### Materials

- Class set of *Student Handout: Analyzing Media Messages* (p. 23)
- Download and copy a class set of *How to Detect Bias in the News*<sup>8</sup>
- Magazines, newspapers, videos from sources such as TV, movies, YouTube
- Access to computers and the Internet

### Opening Challenge

The headlines below appeared in different news sources on the same day. They covered the identical story: statistics released on September 10, 2009 stating that child mortality rates had dropped in the last year. Provide students with a definition of *bias* (see text box) and ask them to identify bias, or lack of it, in these headlines. Discuss their answers.

**Bias:** a tendency or preference towards a particular perspective or result, especially when the tendency interferes with the ability to be impartial or unprejudiced. Bias is generally seen as a “one-sided” perspective.

Wikipedia, Bias (September 2009)

- 1) Mortality reduction is good news
- 2) Child mortality continues to decline, but not fast enough
- 3) UNICEF: Number of deaths of children under 5 continues to drop

<sup>8</sup> Media Awareness Network, *How to Detect Bias in the News*, [http://www.media-awareness.ca/english/resources/educational/handouts/broadcast\\_news/bw\\_bias\\_in\\_the\\_news.cfm](http://www.media-awareness.ca/english/resources/educational/handouts/broadcast_news/bw_bias_in_the_news.cfm) (2009).

# Module 2

Read about all the ways that bias is created in news reporting using the *Media Awareness Network*<sup>9</sup> handout *How to Detect Bias in the News*. Brainstorm examples of biased messaging in media such as print news, advertising, movies, TV shows and social media such as YouTube. You may also bring examples into class to analyze.

*Discuss:* What images or words stand out? What viewpoint is presented? Is it positive, negative, stereotyped, emotionally charged? Whose perspectives or values are presented? Identify values or viewpoints that are not represented (e.g. gender, race, persons with disabilities).

Ask students to rewrite or refine the definition of bias based on their own understanding

## Instructions

Give students copies of *Student Handout: Analyzing Media Messages* (p. 23). In this short independent assignment they use Internet search engines to choose and compare three media pieces on the same topic, analyze the bias in them, and determine the trustworthiness and relevancy of each.

## Discuss

After completing the analyses of media messages, students form groups of three to share their findings. The following questions can guide their discussions.

- Describe the differences in how your chosen media pieces covered the same story or topic.
- What bias did you detect in the pieces you chose? What criteria did you use to determine this?
- When you search for current news or information on a topic, how many news outlets do you visit? Which ones are your favourites?
- Is it important or even necessary to go to more than one source for news or information? What if the information conflicts?

## Extension

Find an example of bias in a news article or editorial and write a letter to the writer and/or editor of the newspaper challenging the biased point of view.

<sup>9</sup> Media Awareness Network,  
<http://www.media-awareness.ca/> (2009).

# Module 2

## Activity 2

### Examining Media Coverage of Global Child Health

#### Materials Needed

- Copy class sets of *Student Handout: Global Child Health in the Media* (p. 24), *Fact Sheet: Pneumonia* (p. 52), *Fact Sheet: Diarrheal Diseases* (p. 53), *Fact Sheet: Malaria* (p. 55)
- Access to computers and the Internet

#### Instructions

One way that news media reflect bias is in the choices made about which stories to cover. In this activity students examine the issue of bias through selection or omission. Students compare media coverage of the H1N1 virus (or some other recent health issue) with media coverage of major global child health issues.

Hand out copies of *Student Handout: Global Child Health in the Media*, *Fact Sheet: Pneumonia*, *Fact Sheet: Diarrheal Diseases*, and *Fact Sheet: Malaria*. Review the assignment instructions for *Global Child Health in the Media*.

#### Discussion

On completion of the assignment discuss the following as a class:

- What gaps exist in the news coverage on global child health? Which stories do you think need more coverage?
- Share any interesting examples of bias you found in the news stories.
- Why don't global child health issues receive more media attention, given the numbers of children they affect?
- How would media coverage differ if 24,000 children were dying in Canada and the US each day?

#### Extension

Repeat this activity closer to the G8 meeting in Canada in June 2010. Compare findings with results from the original analysis to see if global child health issues gain more media attention.

## Activity 3 Filling the Gap Press Conference<sup>10</sup>

### Materials Needed

- Access to computers and the Internet

### Instructions

In this activity, students act as journalists to fill in the gap in media coverage of child health issues by staging a mock press conference. What story do they feel most needs to be told? How will they tell it so it gets heard?

*Step One:* Organize students into groups of three. Groups brainstorm and record story ideas. They can recall interesting topics from their Internet searches in Activities 1 and 2, or they may want to conduct more Internet research for ideas. The following websites are good sources for stories on health issues:

- World Vision Report: Radio Programs<sup>11</sup>
- World Vision International News Room<sup>12</sup>
- World Health Organization: Media Centre<sup>13</sup>
- UNICEF Press Centre<sup>14</sup>

*Step Two:* Once groups choose a topic, they are responsible for hosting a press conference to publicize the story and the issue. They will need to assign a group member to each of the following tasks:

1. Create a five minute, one-page script for the spokesperson delivering the information.
2. Create visuals to support the spokesperson's presentation, including a five frame PowerPoint slide show.
3. Create a one-page press release to be distributed in advance of the press conference.

Students can reference the media sites above for sources of style, language and voice in creating their press releases and press conference. Direct them to the following websites for tips:

- Media Awareness Network: Media Toolkit for Youth Tip Sheet, Writing a News Release, Making A Communications Plan and How to Hold a Media Event<sup>15</sup>

<sup>10</sup> Activity adapted from Baron, M., Beyond Media Messages: Media Portrayal of Global Development. Media Awareness Network. [http://www.media-awareness.ca/english/resources/educational/lessons/secondary/global\\_development/beyond\\_media.cfm](http://www.media-awareness.ca/english/resources/educational/lessons/secondary/global_development/beyond_media.cfm)

<sup>11</sup> World Vision Report: Radio Programs, <http://www.worldvisionreport.org/> (2009).

<sup>12</sup> World Vision International News Room, <http://www.wvi.org/wvi/wviweb.nsf/maindocs/226C8B2D88F716F688257387007E1BBF?opendocument> (2009).

<sup>13</sup> World Health Organization: Media Centre, <http://www.who.int/mediacentre/en/> (2009).

<sup>14</sup> UNICEF Press Centre, <http://www.unicef.org/media/index.html> (2009).

<sup>15</sup> Media Awareness Network. Media Literacy. [http://www.media-awareness.ca/english/tools/main\\_search/search\\_results.cfm](http://www.media-awareness.ca/english/tools/main_search/search_results.cfm) (2009)

# Module 2

- Amnesty International: How to Write a Press Release.<sup>16</sup>
- You Tube: Attawapiskat Press Conference in Ottawa.<sup>17</sup> An example of a press conference led by youth.

*Step Three:* Before conducting each press conference, hand out copies of the group's press release so students can compose questions to ask in their roles as reporters at the conference. Suggest question-starters that encourage development of critical thinking skills such as analysis, synthesis and evaluation.

*Examples:* What conclusions can you draw about...? Can you elaborate on...? In your opinion, what will be the result of...? How do you explain...?

## Extensions

- 1) Use the activities in this module to explore another current news topic.
- 2) Invite a journalist or news editor into the class to observe the press conferences. Ask the guest to talk about how editorial decisions are made and how to attract media attention for a neglected story or issue.

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<sup>16</sup> Amnesty International, How to Write a Press Release,  
[http://www.amnesty.ca/youth/youth\\_action\\_toolkit/how\\_to\\_write\\_press\\_release.php](http://www.amnesty.ca/youth/youth_action_toolkit/how_to_write_press_release.php) (2009).

<sup>17</sup> YouTube, Attawapiskat Press Conference,  
<http://www.youtube.com/watch?v=dPAfgsKefDg> (2008).



## Student Handout

### Analyzing Media Messages

#### Assignment

Find three different media pieces on the same topic. Try to choose ones that include visual elements (photos, video) and that are from different regions of the world. The news search engines listed below will be useful, but feel free to try others.

<b>Google News</b>	<a href="http://news.google.com">http://news.google.com</a>
<b>Yahoo News</b>	<a href="http://news.yahoo.com">http://news.yahoo.com</a>
<b>AltaVista News</b>	<a href="http://news.altavista.com">http://news.altavista.com</a>

A good place to start is Google News. Perform a search for the topic and find an article where a number of other media are reporting on that same topic. This will be shown with a green link at the end of the article description (for example: “all 3,451 news articles”). After following this link, check to see if there are any related images and videos (see the right side of the screen). Following these links will help you find related television news programs and news articles with photos.

When you have your three media pieces, use this series of questions<sup>18</sup> to examine the source of each, its trustworthiness and relevancy. Answering these questions will lay the groundwork for determining bias in each piece. Record your answers.

- What is the message?
- Who is sending the message? Who paid for it?
- Who or what are the sources of the information?
- When and how was this message shared with the public?
- How credible or believable is this (and what makes me think that)?
- What is missing from this message that might be important to know?
- Who is the intended audience?
- Who might benefit from this news?
- Does this message matter to me?
- Can I respond to this message? How?

*Next step:* Use the *How to Detect Bias in the News* handout to determine if and how each media piece conveys bias. Make notes and be specific with your examples. Explain why you feel each example shows bias or a value judgment.

Be prepared to share your findings.

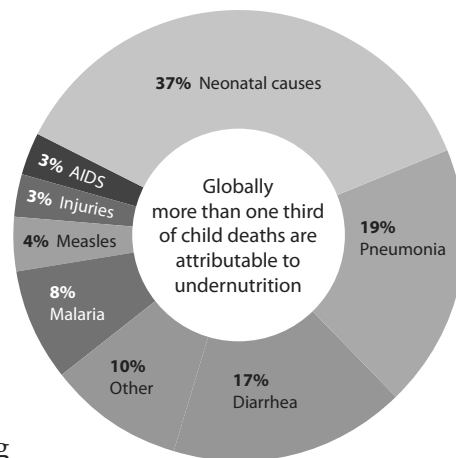
<sup>18</sup> Questions adapted from: Alliance for a Media Literate America, Key Questions to Ask When Analyzing Media Messages, and Media Awareness Network, Curriculum Outcomes: Atlantic Provinces: English Language Arts 7-9.

# Module 2

## Student Handout Global Child Health in the Media

Every day more than 24,000 children die of preventable causes (see Figure 1). Most of the treatments and preventions are easy and cost-effective. For example, a simple mixture of water, salt and sugar, or a single dose of a common vaccine, can mean the difference between life and death for many children who live and die in developing or lesser-developed nations.

Given the great numbers of children who die before reaching their fifth birthday, there's no question this is a big news story. But is this global health tragedy being reported in the media? And how does it compare to coverage of a hot topic like the H1N1 virus?



Child Info: Child Mortality,  
[http://www.childinfo.org/mortality\\_progress.html](http://www.childinfo.org/mortality_progress.html), Sept 2009.

### Assignment

(Note: If H1N1 is no longer relevant, choose another current health topic in the news.)

1. Go to Google News: [www.google.ca/news](http://www.google.ca/news)
2. Search recent health articles to determine the current worldwide death toll from the H1N1 virus. Also visit the World Health Organization at <http://www.who.int/csr/disease/swineflu/updates/en/index.html> for H1N1 situation updates.
3. The first recorded deaths due to H1N1 occurred in the last week of April 2009. Calculate the number of weeks between the last week of April 2009 and today's date. Divide the *current death toll from H1N1* by the *number of weeks* to get the *average number of deaths per week* (see example on pg. 25). Record this in your chart.
4. Enter the health issues from the Google Search column in the chart below into the search field. Choose 'Past Week' or "Past Month" from the list on the left. Note the number of articles that come up for each issue, and record in the chart.
5. Determine the ratio of the number of articles published per deaths for each of the four health issues. Divide the *total number of articles per week* by the *number of deaths per week* to get the *article per death ratio*.
6. Skim read a few of the articles you pulled up with your Google searches, looking for examples of bias (see handout *How to Detect Bias in the News*). Make notes on the types of bias in each article and answer the following questions:
  - i) Make observations about your Google News searches and calculations. What conclusions can you draw?
  - ii) Why are global child health issues not as widely and frequently covered as issues like H1N1?
  - iii) Which health issue do you think deserves more of your attention? Why?

# Module 2

## Health Issues in the Media Chart

\*Statistics from Child Mortality: Progress, Sept 2009.<sup>19</sup>

Google search	Number of Articles/Week	Number of Deaths / Week	Article / Death Rate
e.g. H1N1 Virus	125,000	100	$125,000 / 100 = 1,250$ articles / one death
H1N1			
Under Five Mortality		169,000	
Pneumonia + Child		32,000	
Diarrheal Disease + Child		28,700	
Malaria + Child		13,500	

<sup>19</sup> Childinfo. Child Mortality: Progress, [http://www.childinfo.org/mortality\\_progress.html](http://www.childinfo.org/mortality_progress.html), UNICEF, Sept 2009

# Module 3

## Module 3: The Power of Numbers

Mathematics, Social Studies



Numeracy



Written



Visual



Media

### Students will:

- Use mathematical data to problem solve about a global issue
- Represent and interpret data in various graph formats
- Interpret patterns and relationships using comparative analysis
- Calculate first differences and construct a line of best fit

### Module 3

- Activity 1: Exploring Infant and Child Mortality (50 mins)
- Activity 2: Comparing Mortality Rates (100 mins)
- Supplementary Materials: *Student Handouts: Infant Mortality in Canada and Reducing Child Mortality*; *Teacher Resource: Module 3 Answer Key* (p. 61)

*Note:* This module requires understanding of how to calculate averages and first differences, and how to construct bar, line and scatter graphs.

## Activity 1: Exploring Infant and Child Mortality

### Materials

- Calculators, rulers, pencil, paper, markers, chart or banner paper
- Class set of *Student Handout: Infant Mortality in Canada* (p. 30)

### Opening Challenge

Write the following statement on a piece of chart or banner paper and hang on the wall or board. Ask students to record their responses to this statement on the paper.

**8.8 million children  
under the age of five  
died in 2008**

#### Under-Five Mortality Rate (U5MR)

The under-five mortality rate is the probability of a child born in a specific year dying before the age of five, expressed as a number between zero (will not happen) and one (will always happen) per 1,000 live births. It is a leading indicator of the level of child health and overall development in countries.

Another commonly used indicator is the infant mortality rate, which is the number of infants one year of age or younger that die per 1000 live births.

The World Health Organization (WHO) defines a live birth as any birthed human being who demonstrates independent signs of life, including breathing, voluntary muscle movement, or a heartbeat.

# Module 3

*Discuss:* Imagine you saw this statistic on a billboard: would you stop and take notice? How do statistics help us understand an issue? What do statistics not tell us?

Students work in pairs to break down the above statistic and calculate how many children died in 2008 per day, hour, minute and second. They should reach the following answers:

## 8.8 million

children under the age of five died in 2008

= 24,109 /day

= 1,004 /hour

= 16.7 /minute

**= approx. 1 child every 4 seconds**

*Discuss:* Which of these statistics has the most impact for you? What else do you want to know?

*Extension:* Create a paper “billboard” that displays the statistic for child deaths in 2008 – and its break down – in a public area of the school. Do this to raise awareness for International Day of the Child (Nov 20) or World Health Day (April 7). Invite other students to write their responses to these statistics on the paper billboard.

### Instructions

Explain the concept of under-five mortality rate (U5MR) to students (see text box).

Give each student a copy of *Student*

*Handout: Infant Mortality in Canada.*

Review and complete the assignment, referring to *Teacher*

*Resource: Module 3*

*Answer Key.*

### The Health of Canadian Aboriginal Children

In Canada, wide disparities exist between the health of Aboriginal and non-Aboriginal children. Socio-economic, cultural and environmental factors contribute to these differences.

The health of Canadian Aboriginal populations is challenged by factors such as poverty, lower levels of education, and substandard housing. These factors result in higher infant mortality rates, under-nutrition, lower rates of immunization, and higher rates of obesity, diabetes and other chronic diseases. Geographic isolation and lack of access to healthcare make these problems difficult to address.

Although the infant mortality rates among Canadian Aboriginal populations have been decreasing, they are still three to seven times higher than national averages.

The Human Development Index (literacy rates, GDP, life expectancy) ranks Canada third in the world out of 177 countries. But when we factor in Canada’s Aboriginal reserve populations, this ranking falls to 66th in the world.

Source: UNICEF, Aboriginal Children’s Health: Leaving No Child Behind, <http://www.unicef.ca/portal/SmartDefault.aspx?at=2063> (2009).

## Discuss

When students have completed the assignment, discuss the following:

- What did you learn about infant mortality in Canada? Did anything surprise you?
- What observations can you make about infant mortality rates in regions where Aboriginal populations are high?
- Read the information in *The Health of Canadian Aboriginal Children* text box. Discuss student reactions to this information.
- What more would you like to know about this topic?

## Activity 2: Reducing Child Mortality

### Materials

- Calculators, rulers, pencils, paper
- Class set of *Student Handout: Reducing Child Mortality* (p. 32)
- Downloaded video: *Reducing Child Mortality*<sup>20</sup> (10:00)

### Opening Challenge

Ask students to calculate the minimum amount of money they need to live each day. Think about food, shelter, clothing, entertainment, transportation, etc. Share answers with the class and discuss differences.

Explain that more than one billion people live on less than \$1 per day.

*Discuss:* Could you live on this amount? Why or why not?

Connect the discussion to the Millennium Development Goals (MDGs) as an international response to improve the lives of people around the world. Use *Global Child Survival: An Overview* (p. 7) to review the MDGs.

### Copenhagen Consensus

Copenhagen Consensus is a think-tank based in Denmark that brings together top international economists every four years to reach consensus on the following idea:

*Imagine you had \$75 billion to donate to worthwhile causes. What would you do and where should we start?*

The economists deliver a ranked list of the most promising solutions to ten of the world's most pressing issues, such as malnutrition, climate change, terrorism and air pollution.

The conclusions are meant to inform governments and philanthropists around the world on the best way to spend aid and development money to achieve the most good for people and the planet.

Of the top five ranked solutions in Copenhagen Consensus 2008, four reduce child mortality rates through prevention of malnutrition and disease: micronutrient supplements, micronutrient fortification, expanded immunizations of children, and biofortification of food crops.

See the ranked outcomes of Copenhagen Consensus 2008:  
<http://www.copenhagenconsensus.com/Home.aspx>

<sup>20</sup> Gapminder, Reducing Child Mortality, <http://www.gapminder.org/videos/gapcasts/gapcast-11-reducing-child-mortality/> (2008).

# Module 3

## Instructions

Give students copies of *Student Handout: Reducing Child Mortality*. In this assignment they examine child mortality rates by creating a graph and drawing a line of first differences, then drawing conclusions about Millennium Development Goal 4: Reducing Child Mortality.

When students have completed their assignments, show the Gapminder video *Reducing Child Mortality*.

## Discuss

- What did you discover when you plotted your graph?
- Compare your findings to those in the Gapminder video.
- What variables affect the downward trend in child mortality? How might we speed up reductions in child mortality?
- Which areas of the world still struggle with reducing child mortality? Why is there such concern for these areas?
- Do you think we will achieve MDG 4 by 2015?

## Extension

1. Use the Gapminder World interactive tools at [Gapminder.org](http://Gapminder.org) to explore correlations between under-five mortality and other indicators like births attended by skilled health staff, maternal mortality, income growth, etc. The graphs show changes over time and geographical distribution is displayed on a world map. Use this tutorial<sup>21</sup> to explain how Gapminder World works.
2. Discuss the Copenhagen Consensus (see text box). What do you think of assigning quantitative values to variables like child deaths and quality of health? Debate the pros and cons of addressing global humanitarian problems through economic solutions.
3. Create a multi-media school display using: the student graphs created in this module; a demonstration of Gapminder tools and videos; and an interactive on-line survey to gather qualitative data on student understanding about issues of global child health and mortality (use SurveyMonkey).
4. Use statistics and mathematical principles to create short children's stories that convey data management concepts learned in this module. See Counting Stories<sup>22</sup>, an innovative math project for eliciting student understanding of mathematical concepts.

<sup>21</sup> Gapminder, Mind the Gap! Tutorial, <http://graphs.gapminder.org/world/downloads/instruction.pdf> (2009).

<sup>22</sup> Dalrymple, Shirley., Counting Stories, Math Performance Festival. <http://www.edu.uwo.ca/mpc/ShirleyDalrymple/index.html> (2009).

## Student Handout Infant Mortality in Canada

Canada's infant and under-five mortality rates are among the lowest in the world. However, there are regional differences in these rates.

**Table 1. Infant Mortality Rate (IMR), by territory and province (per 1000 live births)**

Region	2002	2003	2004	2005	2006	Average
Newfoundland and Labrador	4.5	5.0	5.1	6.2	5.3	
Prince Edward Island	1.5	4.9	4.3	2.2	2.1	
Nova Scotia	4.2	5.7	4.6	4.0	4.0	
New Brunswick	3.8	4.1	4.3	4.1	4.0	
Quebec	4.8	4.4	4.6	4.6	5.1	
Ontario	5.3	5.3	5.5	5.6	5.0	
Manitoba	7.1	8.0	7.0	6.6	6.0	
Saskatchewan	5.7	6.3	6.2	8.3	6.1	
Alberta	7.3	6.6	5.8	6.8	5.3	
British Columbia	4.6	4.2	4.3	4.5	4.1	
Yukon	8.8	6.0	11.0	0	8.2	
Northwest Territories	11.0	5.7	0	4.2	10.2	
Nunavut	11.0	19.8	16.1	10.0	13.4	

Source: Statistics Canada, Infant Mortality Rate, <http://www40.statcan.gc.ca/l01/cst01/health21a-eng.htm> (2006).

### Part I

Refer to *Table 1. Infant Mortality Rate (IMR), by territory and province.*

**Aboriginal:** a collective name for all original peoples of Canada and their descendants. Most Aboriginals identify as belonging to one of three main groups: First Nations, Métis and Inuit.

- Calculate the average infant mortality rate for each territory and province. Record on the chart.
- Represent the provincial and territorial averages in a bar graph.
- Label the x-axis *Provinces and Territories*, with intervals for each one. Label the y-axis *Average Infant Mortality Rate (per 1000 live births)*. Label appropriate scales on each axis and title the graph.
- Plot the data for each province or territory. Analyze the results and answer questions below.

### Analysis

1. Compare average infant mortality rates between the provinces and territories. Which are lowest and which are highest?
2. Why might some regions experience higher infant mortality rates? Consider geographical, social and economic reasons.



**Table 2.** Aboriginal Identity Population, by province and territory (2006 Census)

Region	Total Population	Aboriginal Identity Population	Percentage of Population that Identifies as Aboriginal
Newfoundland and Labrador	500,610	23,455	
Prince Edward Island	134,205	1,730	
Nova Scotia	903,090	24,175	
New Brunswick	719,650	17,650	
Quebec	7,435,905	108,425	
Ontario	12,028,895	242,495	
Manitoba	1,133,515	175,395	
Saskatchewan	953,850	141,890	
Alberta	3,256,355	188,365	
British Columbia	4,074,385	196,075	
Yukon	30,190	7,580	
Northwest Territories	41,060	20,635	
Nunavut	29,325	24,915	

Source: Statistics Canada, Aboriginal Identity Population, <http://www40.statcan.gc.ca/l01/cst01/demo60a-eng.htm> (2006).

## Part 2

Refer to *Table 2. Aboriginal Identity Population, by province and territory.*

- Calculate the percentage of the population that identifies as Aboriginal for each province and territory. Divide the Aboriginal Identity Population by the Total Population and multiply by 100. Record these values in the chart.
- Create a scatter plot graph with 2006 *Infant Mortality Rates* on the y-axis and *Percentage of the Population Identifying as Aboriginal* on the x-axis. Label appropriate scales on each axis and title the graph.
- Plot the data for each province or territory. Analyze the results and answer questions below.

### Analysis

1. What does your graph reveal about infant mortality rates in provinces and territories with large proportions of Aboriginal residents?
2. What geographical, social and economic reasons might contribute to these higher rates of infant mortality? What are the implications for Aboriginal child health?

## Student Handout Reducing Child Mortality

The Millennium Development Goals (MDGs) committed all countries around the world to eight goals for reducing poverty and improving the lives of all people by the year 2015. Millennium Development Goal 4 focuses on reducing child mortality by two-thirds of 1990 levels. Child mortality rates around the world have been dropping throughout the last 50 years. But are they dropping fast enough to reach MDG 4 by 2015?

### Assignment

Refer to *Table 1. Levels and trends in under-5 mortality (1990-2008)*.<sup>23</sup>

- Compute first differences for the ‘Under-Five Deaths’ column of Table 1. Record these values in the chart.
- Graph Table 1 as a line graph with *Year* along the x-axis and *Under-Five Deaths* along the y-axis. Compose the graph on paper or, if available, use Microsoft Excel, following the instructions below.
  - a) Enter the table information in the cells.
  - b) Highlight the columns and under ‘insert’ choose ‘Scatter Chart.’
  - c) Click on the chart area.
  - d) Under ‘Layout,’ then ‘Gridlines,’ add Major/Minor Grid lines for x-axis (horizontal) and y-axis (vertical).
  - e) Under ‘Layout,’ then ‘Trendline,’ select ‘Linear Trendline.’
  - f) Choose ‘More Trendline Options.’ Under ‘Forecast,’ input 7.0 periods forward.
  - g) Under ‘Layout,’ enter a ‘Chart Title’ and the ‘Axis Titles.’
- If Microsoft Excel is not available, draw a line of best fit using a ruler.

Year	World-wide Under-Five Deaths (in millions)	First Differences
1990	12.5	
1995	11.4	
2000	10.4	
2005	9.3	
2007	8.9	
2008	8.8	

The Lancet, 2009. [http://www.childinfo.org/files/Lancet2009\\_Comment.pdf](http://www.childinfo.org/files/Lancet2009_Comment.pdf)

<sup>23</sup> You D., T. Wardlaw, P. Salama, G. Jones, Levels and trends in under-5 mortality, 1990–2008, The Lancet, 2009.

# Module 3

## Analysis

1. Based on your calculations of first differences, is this a perfect linear relationship?
2. What relationship does your graph show between time period and under-five deaths?
3. Predict the number of under-five deaths in 2010 and 2015 based on the current rate of progress.
4. Millennium Development Goal 4 aims to see a two-thirds reduction in child mortality by 2015 from 1990 levels. Based on your graph, are we on track to meet that goal?
5. What factors might account for the steady decline in average world child mortality rates?

# Module 4

## Module 4: The Power of Words

Language Arts, Dramatic Arts



Oral



Written



Visual



Performance

### Students will:

- Employ elements of writing style and form appropriate to the purpose and audience
- Understand and apply technical aspects of writing poetry
- Use written and oral language conventions to enhance meaning and artistry
- Engage in active listening
- Create a critical and personal response to a global justice issue

### Module 4

- Activity 1: Poetry Warm Up (60-75 minutes)
- Activity 2: Vox Populi: Spoken Word Activity (150-200 minutes)
- Supplementary Materials: *Student Handouts: At First Glance, Abdula's Story, Tips for Writing and Performing Spoken Word Poetry* and *Student Evaluation Rubric: Spoken Word Performance*

## Activity 1: Poetry Prompts

### Materials

- Copies of *Student Handout: At First Glance* (p. 37). Detach photo captions and set aside.
- Downloaded MP3 of the World Vision Radio podcast *Fake Malaria Drugs*<sup>24</sup> (4:25).
- Class set of *Student Handout: Abdula's Story* (p. 38)

### Instructions

Each of the following are prompts for creating “found” poetry. This type of poetry uses words, phrases or even entire passages from other sources and reframes them as poems by changing metre, rhythm and layout (and thereby meaning), or by altering the text with additions and/or deletions.<sup>25</sup>

### Prompt 1

Listen to the podcast *Fake Malaria Drugs*. Students record descriptive words and phrases (e.g. “hole in the wall pharmacy”) that catch their attention. If needed, play the podcast more than once. Students use their lists of words and phrases to create a short poem.

<sup>24</sup> World Vision Radio, Fake Malaria Drugs, <http://www.worldvisionreport.org/Stories/Week-of-April-18-2009/Fake-Malaria-Drugs> (2009).

<sup>25</sup> Wikipedia, Found Poetry, [http://en.wikipedia.org/wiki/Found\\_poetry](http://en.wikipedia.org/wiki/Found_poetry)

# Module 4

## Prompt 2

Provide one copy of *Student Handout: At First Glance*, with the caption removed, to students working in pairs. One student writes down a word or phrase that first comes to mind when looking at the photo. The second student writes a word or phrase below the partner's ideas. Continue this alternating pattern until all ideas are exhausted. Share the photo caption with students and instruct them to add any additional ideas generated to their lists of words and phrases. Pairs use the completed lists to compose a poem.

## Prompt 3

Students read *Student Handout: Abdula's Story* and highlight or underline points that grab their attention. Ask them to imagine Abdula's life: What would a typical day be like for him? What are his dreams and aspirations? What are his fears? Students brainstorm ideas and use them to write a poem in Abdula's or his mother's voice.

## Activity 2: Vox Populi: Spoken Word Activity

### Materials

- Pen, pencil, paper, word processor, recording device, microphone (optional)
- Class sets of: *Student Handout: Tips for Writing and Performing Spoken Word Poetry* (p. 39) and *Student Evaluation Rubric: Spoken Word Performance* (p. 41)

### Background

Spoken word involves one or more people performing a poem orally, using techniques such as voice, gesture, rhythm and pacing to enhance its meaning. Spoken word makes use of stage techniques and voice as instruments of expression, blending poetry and storytelling, music, multimedia, sound art and performance art.

There are no formal rules or structure in writing spoken word poetry—informal language and free verse are used for deliberate effect. Rules of grammar are not mandatory as long as the message is clear.

Spoken word poetry can be about any topic, but lends itself well to social justice and human rights issues. It can be a tool for advocacy, allowing people without a voice to be heard in a free and socially democratic forum. Spoken word is a contemporary *vox populi* art form made popular by the hip-hop influenced Def Poetry Jam,<sup>26</sup> poetry slams and spoken word festivals.

### Instructions

Before beginning, review and distribute *Student Handout: Vox Populi: Tips on Writing and Performing Spoken Word Poetry*, and the *Student Evaluation Rubric: Spoken Word Performance*.

#### Vox populi

This Latin phrase literally means “voice of the people.” The term is most often used in radio or television broadcasting when spontaneous public opinion is captured during “man on the street” interviews. It is also a dramatic technique used in theatre for revealing the inner thoughts of characters on stage.

<sup>26</sup> Wikipedia, Def Poetry, [http://en.wikipedia.org/wiki/Def\\_Poetry](http://en.wikipedia.org/wiki/Def_Poetry)

# Module 4

Students create a one or two minute spoken word poem expressing their views on an issue such as global child survival. Begin with research on related topics of interest (e.g. under-five mortality rates, malnutrition, deaths from preventable causes, malaria, access to health care and education, gender discrimination, or child labour). Visit [www.worldvision.ca](http://www.worldvision.ca) for more information, and refer to *Global Child Survival: An Overview* (p. 7), the *Fact Sheets* (pp. 51 - 56) and suggested *Further Resources* (p. 65).

After writing, editing and rehearsing their pieces, students can share their spoken word poetry with the class or perform it in a poetry slam for a broader audience to enjoy.

## Extension: Organize a Poetry Slam

In the late 1980s, Marc Kelly Smith, a Chicago poet and construction worker, introduced spoken word poetry slams,<sup>27</sup> competitive events where spoken word is used as a medium for social commentary. A poetry slam is an event where artists compete at the microphone and may be judged by the audience on their performances. Although some slams incorporate a competitive angle, the real point of the slam is to experience the poets and their words. For ideas on organizing a slam see *How to Plan a Spoken Word Contest*<sup>28</sup> or *Holding a poetry slam*<sup>29</sup> by Nancy Blalock.

<sup>27</sup> Wikipedia, Poetry Slam, [http://en.wikipedia.org/wiki/Poetry\\_slam](http://en.wikipedia.org/wiki/Poetry_slam).

<sup>28</sup> eHow, How to Plan a Spoken Word Concert, [http://www.ehow.com/how\\_2156772\\_plan-spoken-word-concert.html](http://www.ehow.com/how_2156772_plan-spoken-word-concert.html) (2009).

<sup>29</sup> Blalock, Nancy, Holding a poetry slam, University of North Carolina. <http://www.learnnc.org/lp/pages/655> (2009)

## Student Handout

### At First Glance



Photo used by permission from Steve Simon, Photosensitive.

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At first glance this is a photo of young boys playing soccer on a patch of dirt. But on closer look you will see the soccer match takes place near a graveyard — a graveyard where many victims of AIDS rest. Without a thought to the usual rituals associated with cemeteries, these friends play and laugh as the sun slowly sets behind them. Playing, laughing, friendships — these are important parts of growing up. Even amidst the death and devastation of AIDS, children will find ways to have fun.

Photo and caption reprinted from AIDS: PictureChange produced by The Canadian Coalition on HIV/AIDS and Youth in Africa, 2005.

# Student Handout

## Abdula's Story<sup>30</sup>

Five-year-old Abdula Kair Abraham's fragile body slowly recovers from the scourge of malnutrition. The swelling in his face, arms and legs brought on by the lack of food has now receded and left in its place dry, cracked skin that covers most of his body. At this point, at least most of his pain is gone.

Peculiarly, little Abdula is in relatively good spirits and even smiles as a health worker examines him. This is the second time in the last six months that he has been admitted to World Vision's Stabilization Centre, a small two-room operation in a health clinic that is part of the larger response to malnutrition in the town of Hirna, Ethiopia. "I was so scared he would die," recalls Fatuma Mohamed, Abdula's mother. "I was thinking since I could not make him better at home, maybe I wasn't feeding him right or taking care of him right and that's why it happened. I felt it was my fault."

Fatuma has been caring for Abdula and three other children on her own, ever since her husband died a year and a half ago. "There are times when we don't even have injera (local flat bread) to eat. I have nothing to feed my child," laments Fatuma as she rubs Abdula's hand. "I still don't have enough at home so when he's cured here I fear about what will happen when I take him home."

Families in this region of Ethiopia faced extreme hunger months ago when the main rainy season failed to come and most of them lost the bulk of their harvest. Since many families are subsistence farmers, when their harvests failed, they had nothing else to feed their children. It is estimated that across Ethiopia more than 4.2 million people are now in need of immediate food aid. Millions of those are children like Abdula.



Following reports of alarming rates of malnutrition a few months ago, World Vision set up the Community-Based Management of Acute Malnutrition (CMAM) programme. CMAM relies strongly on community support to reach children in need and focuses on children under the age of five who are at various stages of malnutrition. "It's possible to save a child from death, but the community has to be part of that solution," remarks Dereje Regass, World Vision's programme coordinator in Hirna. "We train the community so they can help in identifying, assessing and screening the children. They also help us by going door to door to tell other women about the programme."

In the initial stages, the challenges of setting up the programme were substantial. Eight of the treatment areas were set up in remote areas, with medication and supplies transported by staff on donkey back for hours through the highland mountains. Amongst the staff, no one doubts the need or complains about the workload. "Had this programme not been running, children would have died," Dereje continues. "There was no other option for those families."

Fatuma sits beside Abdula on one of the old hospital beds rubbing her child's hands, a mother's touch calming her sick child. "My priority is just to see him live through this."

*Marie Bettings, World Vision*

<sup>30</sup> Abdula's Story is adapted from: World Vision, CMAM programme treats hundreds of children in eastern Ethiopia, 5 Feb 2009.



# Student Handout

## Tips for Writing and Performing Spoken Word Poetry

### Getting Ready

Begin by researching a number of spoken word performances. Analyze the artists' use of language, pacing, rhythm, voice intonation, facial expression, and gesture. Memorize the work and imitate the style of an artist you admire.

Some places to start your research:

#### A) YouTube

- *A Single Rose*<sup>31</sup> by 12 year-old Mustafa Ahmed
- *Sudanese Children*<sup>32</sup> by Shannon Leigh
- *Never Let Me Down*<sup>33</sup> by J. Ivy
- *Speak With Conviction*<sup>34</sup> by Taylor Mali
- *What I Will*<sup>35</sup> by Suheir Hammad

B) bum rush the page: a def poetry jam. Medina, Tony and Louis Reyes Rivera, eds. Three Rivers Press. New York, 2001. (available at chapters.ca)

C) *SlamNation*<sup>36</sup> (1998) DVD and Education Guide (available in censored version for classroom)

D) *Russell Simmons Presents: Brave New Voices DVD series*.<sup>37</sup> This HBO series follows teenagers from 44 communities across the U.S. competing for a spot at the National Slam Poetry championship in Washington, D.C. Order the DVD series at the HBO Store.

E) Attend a local poetry slam. Check out the Calgary International Spoken Word Festival 2009,<sup>38</sup> Toronto Poetry Slam<sup>39</sup> and Canadian Festival of Spoken Word.<sup>40</sup>

### Writing Spoken Word Poetry

**Write without editing.** Write fast or slow, but don't pre-judge your ideas. Write from your own honest observations, experiences and thoughts. The point is to get something down on paper to edit and polish later. You don't have to write your thoughts in order; random lines or verses can be re-organized for coherence at the editing stage.

**Rewrite.** Few people write a masterpiece in one sitting, so edit and re-edit your work. Play with the flow and beat of the lines, use lots of concrete imagery (nouns, adjectives and active verbs), and choose the most precise words or phrases that make your meaning clear. Try to focus the poem on one specific topic. Set it aside for a day or two, then go back and read it with fresh eyes.

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<sup>31</sup> YouTube, A Single Rose, <http://www.youtube.com/watch?v=rbZksEZjRjg>

<sup>32</sup> YouTube, Sudanese Children, [http://www.youtube.com/watch?v=mSqWnP3B\\_t8](http://www.youtube.com/watch?v=mSqWnP3B_t8)

<sup>33</sup> YouTube, Never Let Me Down, <http://www.youtube.com/watch?v=le1kHp5lLmk>

<sup>34</sup> YouTube, Speak With Conviction, <http://www.youtube.com/watch?v=DmLE2bliXCI>

<sup>35</sup> YouTube, What I Will, <http://www.youtube.com/watch?v=LFbE8RBhSDw&NR=1>

<sup>36</sup> SlamNation.com, SlamNation Educational DVD, <http://www.slamnation.com/sales.html>

<sup>37</sup> HBO Store, Brave New Voices DVD Series, <http://store.hbo.com/detail.php?p=100209>

<sup>38</sup> Calgary Spoken Word Festival, <http://www.calgaryspokenwordfestival.com/>, 2009.

<sup>39</sup> Toronto Poetry Slam, <http://torontopoetryslam.com/>, 2009.

<sup>40</sup> Canadian Festival of Spoken Word, <http://cfsw09.blogspot.com>, 2009.

# Student Handout

## Tips for Writing and Performing Spoken Word Poetry (cont'd)

**Read your poem out loud.** Get to know the feel of the words in your mouth and their sound in your ears. Commit them to memory. You'll be performing at some point, so become aware of both the strong and weak elements in your poem. Record your reading and listen critically to your voice in order to make changes or improvements. Refer to the *Student Evaluation Rubric: Spoken Word Performance* for guidelines.

**Read to a trusted friend or classmate.** Once you are satisfied with your poem, share it with someone whose opinion you trust. Ask for honest feedback on improving both the poem and your performance. Be receptive to suggestions, but remember it is your decision whether or not to make any changes.

### Performing Spoken Word Poetry

(See also *Student Evaluation Rubric: Spoken Word Performance*)

**Voice.** This is your most important and powerful performance tool and all you need to carry the poem off well. Work on pitch (high or low sound tone), intonation (the melody established by varying patterns of pitch), and pace (the speed of speech, which sets mood and tone). In pure spoken word performance, costumes, props and instruments are not allowed. While this may seem intimidating (or even boring) think of performers or speakers you admire whose voices alone mesmerize the audience.

**Body language, gesture and facial expression.** Use your body to convey the nuances of the poem. Enhance the words with facial expression, hand gestures<sup>41</sup> and movement, exuding confidence through your placement on stage and use of voice and/or microphone. Behaviours such as stuttering, shuffling, avoiding eye contact, nervous hand gestures, etc. are generally considered bad form, but are allowable if used deliberately for a specific effect.

**Memorization.** Reading from a paper is allowed...so is memorizing! Memorization allows you to make eye contact with the audience, pay attention to your delivery, and appear confident and prepared on stage.

**Audience awareness.** Be aware of your audience and speak to them. You are confiding your thoughts and asking them to relate. Think about Shakespeare's use of asides and soliloquies to draw the audience into a character's confidence.

**Technical elements.** This includes keeping within time limits, microphone use, and physical use of stage space (also called blocking).

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<sup>41</sup> Wikipedia, Types of Gestures,  
[http://en.wikipedia.org/wiki/Types\\_of\\_gestures](http://en.wikipedia.org/wiki/Types_of_gestures), 2009.

# Module 4

## Student Evaluation Rubric Spoken Word Performance

Criteria	Level 4	Level 3	Level 2	Level 1
<b>Voice</b>	<ul style="list-style-type: none"> <li>- Excellent use of voice qualities such as pitch, intonation and pacing</li> <li>- Voice projection is clear and audible</li> <li>- Fluent and coherent delivery</li> </ul>	<ul style="list-style-type: none"> <li>- Good use of pitch, intonation and pacing</li> <li>- Voice projection is mostly clear and audible</li> </ul>	<ul style="list-style-type: none"> <li>- Some use of pitch, intonation and pacing</li> <li>- Voice projection is sometimes clear and audible</li> </ul>	<ul style="list-style-type: none"> <li>- Little use of voice qualities to enhance performance</li> <li>- Voice is too quiet to be heard throughout performance space</li> <li>- Low level of clarity</li> </ul>
<b>Body Language</b>	<ul style="list-style-type: none"> <li>- Excellent use of facial expression, gesture and body language to enhance poem</li> <li>- Body language adds meaning</li> </ul>	<ul style="list-style-type: none"> <li>- Good use of facial expression, gesture and body language to enhance poem</li> </ul>	<ul style="list-style-type: none"> <li>- Some use of facial expression, gesture and body language to enhance poem</li> </ul>	<ul style="list-style-type: none"> <li>- Minimal use of body language to enhance poem</li> <li>- Meaning of poem depends on script alone</li> </ul>
<b>Audience Awareness</b>	<ul style="list-style-type: none"> <li>- Makes strong eye contact with audience</li> <li>- Consistently addresses the audience throughout</li> <li>- Audience is highly and visibly engaged</li> </ul>	<ul style="list-style-type: none"> <li>- Good use of eye contact</li> <li>- Addresses audience for most of the performance</li> <li>- Audience is engaged</li> </ul>	<ul style="list-style-type: none"> <li>- Some eye contact made</li> <li>- Addresses audience in some parts of performance</li> <li>- Audience is sometimes engaged</li> </ul>	<ul style="list-style-type: none"> <li>- No attempt to make eye contact with audience</li> <li>- Does not address audience</li> <li>- Audience is not engaged</li> </ul>
<b>Memorization</b>	<ul style="list-style-type: none"> <li>- Fully memorized without reliance on script</li> </ul>	<ul style="list-style-type: none"> <li>- Mostly memorized</li> <li>- Some reliance on script</li> </ul>	<ul style="list-style-type: none"> <li>- Some parts memorized</li> <li>- Mostly relies on script</li> </ul>	<ul style="list-style-type: none"> <li>- Not memorized</li> <li>- Reads completely from script</li> </ul>
<b>Technical Aspects</b>	<ul style="list-style-type: none"> <li>- Strong and conscious use of stage blocking</li> <li>- Performs within time limit or 10 second grace period</li> <li>- Very comfortable with microphone and uses it for effect</li> </ul>	<ul style="list-style-type: none"> <li>- Good use of stage blocking for effect</li> <li>- Within 20 seconds over time limit</li> <li>- Uses microphone appropriately</li> </ul>	<ul style="list-style-type: none"> <li>- Occasional use of stage blocking for effect</li> <li>- Within 30 seconds over time limit</li> <li>- Some proper use of microphone</li> </ul>	<ul style="list-style-type: none"> <li>- Stage blocking is weak (e.g. turns back to audience while speaking)</li> <li>- Exceeds both time and overtime limits</li> <li>- Improper or ineffective use of microphone</li> </ul>

### Notes:

# Module 5

## Module 5: Making Good on the MDGs

Communications Technology, Social Studies



Oral



Written



Media



Tech

### Students will:

- Identify theme, purpose and audience for media productions
- Use multimedia technology and appropriate conventions and techniques in creating a media production
- Work constructively in groups, using communication, problem-solving and organizational strategies to achieve a common goal
- Understand the significance of the Millennium Development Goals

### Module 5

- Opening Challenge (30 mins)
- Activity 1: The Millennium Development Goals Web Quest (50-100 mins)
- Activity 2: Podcasting for Progress (200 mins)
- Supplementary Materials: *Student Handouts: Web Quest* and *Podcasting for Progress*; *Global Child Survival: An Overview*; *Student Evaluation Rubric: Video Podcast*

*Note:* This module requires prior student knowledge of video recording devices, video editing software and uploading procedures.

### Materials

- Copies of *Student Handout: Web Quest* (p. 45) and *Global Child Survival: An Overview* (p. 7)
- Access to computers and the Internet
- Downloaded video: *GOOD: The Millennium Declaration*<sup>42</sup> (3:15)
- Sticky notes, markers

## Activity 1: Millennium Development Goals Web Quest

### Opening Challenge

You are working with a group of youth on an international campaign to eradicate extreme poverty around the world. List five to 10 priority areas the campaign should focus on (e.g. eliminate world hunger). Write each idea on a separate sticky note.

#### United Nations (UN)

An international organization made up of 192 member states and founded in 1945. Its aim is to facilitate cooperation in law, economics, human rights and social progress between nations, and to end conflict and promote world peace.

<sup>42</sup> YouTube, GOOD: The Millennium Declaration, <http://www.youtube.com/watch?v=vddX4n30sXY> (2009).

Place sticky notes from all groups on the board or chart paper. Examine the ideas and determine broad categories or themes that emerge. Group sticky notes with similar ideas into the categories.

*Option:* Students can use online software such as Bitstrips for Schools <sup>43</sup> or ToonDoo <sup>44</sup> to create comic strips for promoting their campaign ideas.

Introduce students to the Millennium Development Goals using *Global Child Survival: An Overview* and the video *GOOD: The Millennium Declaration*. Compare students' campaign priorities with the MDGs.

*Discuss:* What similar ideas exist between your campaign priorities and the MDGs? What ideas are missing from the class campaign priorities? From the MDGs?

## Instructions

In this assignment students conduct a web quest to learn more about the Millennium Development Goals and how they support global child health. Hand out copies of *Student Handout: Web Quest and Global Child Survival: An Overview* to students. Students read the overview and complete the web quest, either individually or in pairs.

## Discuss

When students have completed their web quests, facilitate the sharing of information with one of the following techniques.

1. *Expert Hotseat:* One student “expert” sits in the centre of a circle formed by the rest of the class who ask the expert questions from the web quest assignment or ones of their own making. The “expert” can be replaced by anyone who challenges the answer, or has more information to share on the topic.
2. *Jigsaw Groupings:* Number students from one to four. Organize students into home groups composed of the same number (i.e. all ones in a group, all twos, etc.) Assign each home group a few questions from the web quest. Groups discuss the assigned questions then reorganize into new groups composed of experts from groups 1 through 4. Each expert shares information from the home group discussions with the newly formed groups.
3. *On the Spot Response:* Divide students into equal groups. Members count off, beginning at number one, until each group member has a number. Randomly call out the number of a question from the web quest assignment. Each group has 30 seconds to huddle and decide on one response. Call out a group member number. All students assigned that number stand up. Choose one or two to answer the question. Keep the questions, huddle time and response time rapid, and give positive validation to the answers.

<sup>43</sup> Bitstrips For Schools,  
<http://bitstripsforschools.com/tour/> (2009).

<sup>44</sup> ToonDoo and ToonDooSpaces,  
<http://www.toondoo.com/> (2009).

## Activity 2: Podcasting for Progress

### Materials

- Class set of *Student Handout: Podcasting for Progress* (p. 46), *Student Evaluation Rubric: Video Podcast* (p. 47).
- Download and copy class sets of Media Awareness Network handouts: *What is a Video Podcast?*<sup>45</sup> and *Camera Shots*<sup>46</sup>.
- Videocameras (or other recording devices, such as cellphones), microphones, lights, tripods, computer editing software (optional)

### Instructions

*Discuss:* What is a video podcast? What devices can be used to watch them? Which podcasts are your favourites and why has podcasting become so popular? Listen to radio podcasts on World Vision Report<sup>47</sup> or see video/audio podcasts at UNICEF:Vodcast<sup>48</sup>

#### Video Podcast

A video file distributed over the Internet for playback on mobile devices and personal computers. It can be created on a cell phone, a video camera, a webcam, or any device that records video. The process can be simple or complex, edited or unedited, with soundtrack or without. Source: Media Awareness Network

Organize students into groups of three or four. Handout copies of *Student Handout: Podcasting for Progress Assignment* and *Student Evaluation Rubric: Video Podcast*. In this assignment students represent a not-for-profit organization with a mandate to improve global child health and well-being. The organization is creating a podcast to garner media and public attention on the issue of child health and the MDGs. Review the assignment requirements. Groups brainstorm a name and specific mandate for their organization.

Handout copies of Media Awareness Network resources *What is a Video Podcast?* and *Camera Shots*. Use one or more of the facilitation strategies from Activity 1 (p. 43) to review information on pre-production, production and post-production, camera techniques and storyboards. Ensure students understand technical elements before creating storyboards and podcasts.

When the podcasts are complete, share them with the class. Groups can devise one or two discussion questions to engage the audience after viewing each video. Podcasts can be evaluated using *Student Evaluation Rubric: Video Podcast*.

**Extensions** (also see *Taking Action: Youth-Led Initiatives*, p. 48)

1. Post video podcasts to websites or blogs, or enter them in online contests.
2. Send podcasts to politicians or relevant organizations.
3. Host a screening for other classes, families or community members.
4. Send your best video podcasts to [global\\_ed@worldvision.ca](mailto:global_ed@worldvision.ca) for possible online publication.

<sup>45</sup> Media Awareness Network, Student Tool Kit Handout: What is a Video Podcast? [http://www.media-awareness.ca/english/resources/educational/handouts/global\\_development/democratic\\_citizenship.cfm](http://www.media-awareness.ca/english/resources/educational/handouts/global_development/democratic_citizenship.cfm) (2009).

<sup>46</sup> Media Awareness Network, Student Tool Kit Handout: Camera Shots. [http://www.media-awareness.ca/english/resources/educational/handouts/global\\_development/democratic\\_citizenship\\_h2.cfm](http://www.media-awareness.ca/english/resources/educational/handouts/global_development/democratic_citizenship_h2.cfm) (2009).

<sup>47</sup> World Vision Report. <http://www.worldvisionreport.org/> (2009).

<sup>48</sup> UNICEF:Video/Audio. [http://www.unicef.org/videoaudio/video\\_vodcast.html](http://www.unicef.org/videoaudio/video_vodcast.html) (2009).

# Student Handout

## Web Quest

**Instructions:** Write a personal response to the Opening Question. Then answer the Web Quest Questions, consulting the suggested online resources, as well as other ones. Remember to paraphrase the information you find and keep a bibliography of all sites you use.

**Opening Question:** More than one billion people survive on less than one dollar per day. Could you? Why or why not?

### Web Quest Questions

- 1) Briefly describe the Millennium Development Goals and list the target for each goal.
- 2) Are we on track to achieve MDG 4? Why or why not? Which other MDGs must be achieved in order to reach MDG 4?
- 3) “Under-five mortality is a critical indicator of overall child health.” Explain.



**Online Resource 1** - Website: *UN Cyberschoolbus: The Millennium Development Goals*  
<http://cyberschoolbus.un.org/mdgs/index.asp>



**Online Resource 2** - Document: *End Poverty 2015: Goal 4*  
<http://www.un.org/millenniumgoals/2008highlevel/pdf/newsroom/Goal%204%20FINAL.pdf>



**Online Resource 3** - Video: *UN Millennium Campaign: Goal 4 – Child Health* (5:01)  
<http://www.youtube.com/watch?v=TJjQW4f8EJo&feature=Playlist&p=F3CADB5A71355A4D&index=6>

- 4) “Child health depends on maternal health.” Agree or disagree and support your opinion.
- 5) Why is the Gapcast video called *Bangladesh Miracle*? What caused this miracle to happen?
- 6) If under-five mortality rates are dropping in countries like Bangladesh, should we still be concerned about MDGs 4 and 5? Explain.



**Online Resource 4** - Video: *UN Millennium Campaign: Goal 5 – Maternal Health* (5:01)  
<http://www.youtube.com/watch?v=76W3AdjTRo&feature=Playlist&p=F3CADB5A71355A4D&index=9>



**Online Resource 5** - Video: *Bangladesh Miracle* (5:32)  
<http://www.gapminder.org/videos/gapcasts/gapcast-5-bangladesh-miracle/>



**Online Resource 6** - Video: *Reducing Child Mortality* (10:00)  
<http://www.gapminder.org/videos/gapcasts/gapcast-11-reducing-child-mortality/>

- 7) What is the G8? Which countries take part?
- 8) What happens at the G8 Summit each year? Where is it being held next?
- 9) What is the difference between the G8 and the G20?
- 10) How would you convince G8/G20 leaders to make global child health a priority?



**Online Resource 7** - Website: *How the G8 Works*  
<http://g8.gc.ca/about/how-the-g8-works/>



**Online Resource 8** - Website: *World Vision: Five For 5*  
<http://www.worldvisionmedia.ca/fiveforfive/>



**Online Resource 9** - Video: *UNICEF: The J8 meets the G8*  
<http://www.youtube.com/watch?v=WBH6smFYzhI&NR=1>



**Online Resource 10** - Video: *Huntsville G8 Summit*  
<http://www.youtube.com/watch?v=T7-l2oo9ymg>

# Student Handout

## Podcasting for Progress

Assignment due date: \_\_\_\_\_

You and your peers work for a Canadian Non-Governmental Organization (NGO) focused on improving global child health and well-being. Your organization fully supports the Millennium Development Goals and is working hard to see that Goal 4: Reduce Child Mortality and Goal 5: Improve Maternal Health are achieved by 2015.

In June 2010 the world will watch as country leaders from the eight most powerful nations meet in Canada for the G8 Summit. Your organization wants to put global child health and the MDGs on the agenda at that Summit. To do this you need to gain media and public attention. Your group is being challenged to create a video podcast that draws attention to the issues and also suggests progressive solutions.

Your audience is your peers, the general public and world leaders. Choose a tone and style appropriate to the topic and message.

### Guidelines:

1. Podcasts should be three to five minutes in length.
2. All content in your podcast must be appropriate and teacher-approved before production.
3. Each group member must play an active role in the planning and production of the podcast.
4. To create a successful podcast, follow the steps and techniques in *What is a Video Podcast?* and *Camera Shots*.
5. Read the *Student Evaluation Rubric: Video Podcast* for evaluation guidelines.
6. Have fun!

After your podcast is completed and handed it in for evaluation, detach and fill in the Peer Evaluation Postcard below. Submit your postcards individually to your teacher.

<b>Peer Evaluation Postcard</b>		<b>Name:</b> _____
<b>Instructions:</b>		
<ul style="list-style-type: none"> <li>• Put your name on this card. Give it to your group members to fill in.</li> <li>• Each group member fills in constructive comments below. (Use reverse side for more space.)</li> <li>• Read your comments to understand what you did well and where you might improve.</li> <li>• Submit this postcard to your teacher.</li> </ul>		
You contributed best to the project when you...		
Your most helpful ideas were...		
Some contributions you might make in future are...		



# Student Evaluation Rubric

## Video Podcast

Criteria	Level 4	Level 3	Level 2	Level 1
<b>Content</b>	<ul style="list-style-type: none"> <li>- Podcast demonstrates a thorough and complex understanding of the topic</li> <li>- Information presented is accurate and current</li> <li>- A wide variety of sources used</li> </ul>	<ul style="list-style-type: none"> <li>- Podcast demonstrates a good understanding of the topic</li> <li>- Most of the information is accurate and current</li> <li>- A variety of sources used</li> </ul>	<ul style="list-style-type: none"> <li>- Podcast demonstrates some understanding of the topic</li> <li>- Some of the information is accurate and current</li> <li>- Some good sources were used</li> </ul>	<ul style="list-style-type: none"> <li>- Podcast demonstrates little understanding of the topic</li> <li>- Information is often inaccurate and/or outdated</li> <li>- Few good sources were used</li> </ul>
<b>Creativity</b>	<ul style="list-style-type: none"> <li>- Script, storyboard, tone and style of the podcast exhibit creativity, originality and innovation</li> </ul>	<ul style="list-style-type: none"> <li>- Creative elements enhance the podcast</li> </ul>	<ul style="list-style-type: none"> <li>- Some creative elements enhance the podcast</li> </ul>	<ul style="list-style-type: none"> <li>- The podcast lacks creativity</li> </ul>
<b>Technical Production</b>	<ul style="list-style-type: none"> <li>- Strong use and understanding of techniques and procedures for creating/editing video productions</li> <li>- Transitions between clips/photos are always smooth</li> </ul>	<ul style="list-style-type: none"> <li>- Good use and understanding of techniques and procedures for creating/editing video productions</li> <li>- Most transitions are smooth</li> </ul>	<ul style="list-style-type: none"> <li>- Some use and understanding of techniques and procedures for creating/editing video productions</li> <li>- Some transitions are smooth</li> </ul>	<ul style="list-style-type: none"> <li>- Little use or understanding of techniques and procedures used for creating/editing video productions</li> <li>- Transitions are poorly edited</li> </ul>
<b>Camera Techniques</b>	<ul style="list-style-type: none"> <li>- Shots are clearly focused and well framed</li> <li>- Camera distance, angle and movement are always used effectively</li> </ul>	<ul style="list-style-type: none"> <li>- Most shots are clearly focused and well framed</li> <li>- Camera distance, angle and movement are used to good effect</li> </ul>	<ul style="list-style-type: none"> <li>- Some shots are clearly focused and well framed</li> <li>- Camera distance, angle and movement are sometimes effective</li> </ul>	<ul style="list-style-type: none"> <li>- Many shots are unfocused and poorly framed</li> <li>- Camera techniques are ineffective</li> </ul>
<b>Enhancements</b>	<ul style="list-style-type: none"> <li>- Soundtrack enhances mood, quality and understanding of content</li> <li>- Use of graphics adds significantly to the effectiveness of the podcast</li> </ul>	<ul style="list-style-type: none"> <li>- Soundtrack often enhances the podcast</li> <li>- Additional graphics enhance the podcast</li> </ul>	<ul style="list-style-type: none"> <li>- Soundtrack sometimes enhances the podcast</li> <li>- Few effective graphics are used</li> </ul>	<ul style="list-style-type: none"> <li>- Soundtrack detracts from the effectiveness of the podcast</li> <li>- Graphics are not well used or not used at all</li> </ul>
<b>Overall Level</b>				

## Notes:

# Taking Action

## Youth-Led Initiatives

*We are not the sources of our problems; we are the resources that are needed to solve them. We are not expenses; we are investments. We are not just young people; we are people and citizens of this world...and despite our different backgrounds, we share a common reality. We are united by our struggle to make the world a better place for all.*

— Children’s Forum delegates address the United Nations Special Session on Children, May 2002

Students extend their learning through constructive action, developing the skills and attitudes needed to become informed global citizens. As the world becomes more interconnected, local and global citizenship skills are critical for both academic and career success. In *In the Global Classroom*, Graham Pike and David Selby say: “Student-directed action, around issues that are relevant to their lives and their community, provides an important grounding in the practice of responsible citizenship.”<sup>49</sup>

Educators can help young people identify the issues they are passionate about and support them in meaningful actions. To support youth action in your classrooms encourage students to:

1. Reflect on things they want to change or improve
2. Identify their interests and passions
3. Conduct research to become informed about issues
4. Determine personal goals and objectives
5. Establish a project plan and timeline
6. Identify and access resources and support
7. Challenge and motivate others to participate
8. Execute their plan
9. Evaluate their efforts
10. Communicate their results

### Youth Leadership Challenge

2010 is a year for action. Young people can take a stand on reducing child mortality rates by telling the Canadian government that child health needs to be at the top of the G8 Summit agenda when world leaders meet in Ontario in June 2010.

Visit: <http://cli.gs/worldvisionleadershipchallenge>

## Resources for Youth-Led Action Plans

### Taking It Global Guide to Action: Simple Steps Towards Change<sup>50</sup>

Take students through the process of visualizing, initiating, executing and evaluating an action project.

### Only With Your Voice: Millennium Development Goals Youth Action Guide<sup>51</sup>

The Millennium Campaign informs, inspires and encourages the involvement of young people in the realization of the MDGs. This guide discusses what needs to be done to reach the goals, how youth are specifically affected and what they can do to raise awareness.

### Youth Action Zone<sup>52</sup>

World Vision Canada offers youth programs such as Youth Empowered conferences, Youth Leadership Retreats and Youth Ambassadors, as well as campaign actions and other opportunities for developing global citizenship skills.

<sup>49</sup> Pike, G. and D. Selby. *In the Global Classroom 2*. Pippin Publishing Corporation, Toronto (2000).

<sup>50</sup> Taking It Global, *Taking It Global Guide to Action: Simple Steps Towards Change*, <http://www.tigweb.org/action/guide/> (2009).

<sup>51</sup> Millennium Campaign, *Millennium Development Goals: Youth Action Guide*, [http://tig.phpwebhosting.com/themes/mdg/action\\_guide\\_en.pdf](http://tig.phpwebhosting.com/themes/mdg/action_guide_en.pdf)

<sup>52</sup> World Vision Canada: Youth Action Zone, <http://www.worldvision.ca/youth>

## Action Ideas to Get Started

- Showcase student work from *Alive at Five* modules in a public space.
- Organize a school assembly or open forum debate.
- Write children's stories about child health and host readings at local schools and libraries.
- Host a school or community dinner and educate about the causes and effects of malnutrition on children.
- Fundraise for a child health-focused organization or project. Educate donors on how funds are used.
- Start an online petition or join a campaign working to put global child health and survival on the G8 agenda.
- Create a website or blog at youth action websites, start a school group or educational radio show.
- Research Canada's commitments to global child health. Invite a local politician to speak about Canada's priorities in a Q and A session.



## Fact Sheets

**Fact Sheet 1:** Maternal and Newborn Health

**Fact Sheet 2:** Pneumonia

**Fact Sheet 3:** Diarrheal Diseases

**Fact Sheet 4:** Sanitation and Disease

**Fact Sheet 5:** Malaria

**Fact Sheet 6:** Malnutrition

**Survive to Five:** Module 1 Role Play Cards

**Teacher Resource:** Module 3 Answer Key

**Glossary of Technical Terms**

**Further Resources**

# Fact Sheet 1

## Maternal and Newborn Health

*Five years is not a child's lifetime in Canada and yet for millions around the world, it's the only shot at life they get. It's unacceptable when we have the know-how and the resources to change that reality.*

— Dave Toycen, President, World Vision Canada

- **The earliest days are the most vulnerable.** Almost 40% of under-five child deaths in the world occur in the first 28 days of life (the neonatal period).
- **Most neonatal deaths are preventable.** The majority of newborn deaths are caused by severe infections, asphyxia (oxygen deficiency) and premature birth.<sup>53</sup> Most of these deaths can be prevented by: access to prenatal care, birth attendants and emergency care; improved nutrition, screening and immunizations for pregnant mothers, and better access to clean water and sanitation.
- **The link between maternal and newborn health.** The health of a child is first influenced in the womb. It is estimated that 15% of all newborns are born underweight, an underlying factor in 60 to 80% of all newborn deaths. There is a strong connection between maternal undernutrition and low birth weight.<sup>54</sup>
- **Poverty is a factor.** 99% of maternal deaths due to pregnancy or childbirth complications, and under-five child deaths, occur in low- and middle-income countries, particularly sub-Saharan Africa and South Asia. Poverty increases the rate of infections, reduces access to healthcare and results in malnutrition.<sup>55</sup>
- **Low cost solutions.** Cost-effective interventions can improve maternal and newborn survival rates. These include: prenatal care to screen for infections; monitoring the health of the fetus and providing nutritional support; skilled birthing attendants; emergency obstetric and newborn care; good nutrition for newborns and nursing mothers; and post-natal (after birth) care for mother and baby.

### Model Mother, Healthy Child

With three young healthy children, 27-year-old Mrs. Kham reflects on how her life in Phonthong Village, Laos has changed in just a few years. Her first three pregnancies ended tragically: one miscarriage and the deaths of two infants within days of birth.

Health services and health education in her community did not exist, leaving Mrs. Kham to cope with her losses alone. Now, with the services and health education provided through World Vision's Pakkading Mother and Child Health Project, she is able to raise a healthy family with the certainty that her children have a promising future.

Working alongside the Pakkading District Government, World Vision provided financial support and training to district health workers. District health clinics were made more accessible by setting up drop-in hours for pregnant women and mothers. The infant mortality rate in Phonthong dropped from 14 to 15 infant deaths per year, to one or two infant deaths per year.

Mrs. Kham has also benefited from the "Model Mothers" program. Model Mothers are women volunteers who participate in training on basic healthcare, hygiene, nutrition, and pre/post-natal care. Upon completing the training, these women return to their communities to share their knowledge.

### Research, Think, Debate

Research: The rate of premature births in North America compared to African countries, and the link to reproductive technologies.

Think: If you were unable to have children, would you turn to assisted reproduction techniques? Why or why not?

Debate: The benefits of North American reproductive technologies do/ do not outweigh the resulting increases in preterm births.

### Additional Resources

Video: *WHO: Great Expectations* (6:40) [http://www.who.int/features/great\\_expectations/en/index.html](http://www.who.int/features/great_expectations/en/index.html)

Audio: *World Vision Report: Midwife in Malawi* (8:29) <http://www.worldvisionreport.org/Stories/Week-of-March-14-2009/Midwife-in-Malawi>

Document: *The State of the World's Children 2009-Youth Report* [http://youth.unicefusa.org/assets/pdf/0027-unicef-youthreport09-8\\_4.pdf](http://youth.unicefusa.org/assets/pdf/0027-unicef-youthreport09-8_4.pdf)

<sup>53</sup> Landers, C. *State of the World's Children Youth Report 2009: Maternal and Newborn Health*, [http://youth.unicefusa.org/assets/pdf/0027-unicef-youthreport09-8\\_4.pdf](http://youth.unicefusa.org/assets/pdf/0027-unicef-youthreport09-8_4.pdf) (2009).

<sup>54</sup> UNICEF, *State of the World's Children 2009*, <http://www.unicef.org/sowc09/> (2009).

<sup>55</sup> Phumaphi, J., *Poverty and Health: Children held hostage. Working towards equity in child survival*, World Health Organization (2006).

# Fact Sheet 2

## Pneumonia

*Pneumonia kills more children than any other illness -- more than AIDS, malaria and measles combined..*

— from *Pneumonia: The Forgotten Killer of Children*, World Health Organization and UNICEF

- **Pneumonia is the leading cause of death in children.** An estimated 1.8 million children under the age of five die each year from this acute respiratory infection (see text box). 40% of these deaths are in Africa.<sup>56</sup>
- **Poverty is a factor.** More than 95% of all new pneumonia infections each year occur in children under the age of five living in developing countries.<sup>57</sup>
- **Children with weak immune systems are at greatest risk.** Infants and children who are malnourished or suffering from other illnesses, such as AIDS or measles, are more likely to develop pneumonia.<sup>58</sup>
- **Pneumonia can be prevented.** Immunization, good nutrition and addressing environmental factors – overcrowded living conditions or poor air quality from indoor cooking fires – can decrease the chances of contracting the disease. A pneumonia vaccine for children is available, but at \$50 US per dose it is out of reach for most people in the developing world.
- **Most cases of pneumonia are treatable.** Antibiotics can be used in the most severe cases, which are often due to bacterial pathogens. However, a high level of resistance to antibiotic treatment is a problem in many parts of the world.
- **Early diagnosis is critical.** Pneumonia is treatable only if caught in time. Even though it is the number one killer of children in the developing world, only one in five parents know the tell-tale symptoms of pneumonia, such as fast or difficult breathing. Educating parents to recognize the early symptoms ensures children receive prompt medical care.<sup>59</sup>

### Afghanistan: Immunization and Education

Twelve years ago, Ghulam Sahee Mohammadi's eight-month-old daughter fell ill with pneumonia. The ruling Taliban would not let a male pediatric specialist examine her, because she was a girl. She died soon after.

Mohammadi works as a vaccinator in the city of Karokh, in Herat province. "I was the first to work in immunization in Karokh. That was even before the Taliban," he recalls. "When we started, there was no electricity here. No radio. No newspapers. No education. We had only a small broken fridge, and almost no stock of medicines."

The desperate situation of women and children in Afghanistan is ranked among the worst in the world: worst infant mortality; second worst maternal mortality; third worst child mortality; and fifth worst neonatal mortality.

World Vision's Better Health for Afghan Mothers and Children (BHAMC) project in Herat Province helps community-based health workers deliver "timed counseling" messages for mothers at each stage of the birth-cycle, from birth preparedness to infant feeding and immunization.

"We talk about the benefits of vaccinations with the women," says Mohammadi's daughter Paristu, also a vaccinator. "The good results they'll see for their child's future. I hope in 20 years we will have succeeded in increasing the immunization level of women and children in the community. Eradicating diseases like tetanus, diphtheria, polio, TB, measles, hepatitis, and influenza."

### Research, Think, Debate

Research: The controversies surrounding the safety and ethics of widespread immunization programs.

Think: Do you get the yearly flu vaccine? Are you in favour of widespread use of vaccines?

Debate: Pneumococcal vaccination is available, but not part of routine immunization programs for Canadian children. Should it be?

### Additional Resources

Video: *Antibiotics and Pneumonia in Honduras* (3:58) [http://www.pbs.org/wgbh/rxforsurvival/series/video/d\\_pne2\\_dis\\_pneu1\\_rm\\_h.html](http://www.pbs.org/wgbh/rxforsurvival/series/video/d_pne2_dis_pneu1_rm_h.html)

Website: *World Health Organization: Pneumonia* <http://www.who.int/mediacentre/factsheets/fs331/en/index.html>

Document: *Pneumonia: The Forgotten Killer of Children* [http://whqlibdoc.who.int/publications/2006/9280640489\\_eng.pdf](http://whqlibdoc.who.int/publications/2006/9280640489_eng.pdf)

<sup>56</sup> PBS, *Deadly Diseases: Pneumonia*, <http://www.pbs.org/wgbh/rxforsurvival/series/diseases/pneumonia.html> (Mar 2006).

<sup>57</sup> UNICEF, *Childinfo: Pneumonia*, <http://www.childinfo.org/pneumonia.html> (Jan 2009).

<sup>58</sup> UNICEF, *Pneumonia: The Forgotten Killer of Children*, [http://whqlibdoc.who.int/publications/2006/9280640489\\_eng.pdf](http://whqlibdoc.who.int/publications/2006/9280640489_eng.pdf) (2006).

<sup>59</sup> PBS, *ibid.*

# Fact Sheet 3

## Diarrheal Diseases

*Diarrhea is the world's most effective weapon of mass destruction.*

—Rose George, journalist and author of *The Big Necessity: The Unmentionable World of Human Waste and Why it Matters*

- **Diarrheal diseases are the second leading cause of death after pneumonia.**

Diarrheal diseases caused by pathogens such as rotavirus, cholera, e. coli and salmonella result in an estimated 1.7 million child deaths every year, making diarrheal diseases the second largest killer of children under five.<sup>60</sup>

- **Deaths from diarrhea disproportionately target the poor.**

Children in developing countries are most at risk of diarrheal disease because of malnourishment, lack of access to clean water, poor environmental sanitation, limited parental education and poor health care. Children who survive persistent diarrhea suffer from stunted growth and learning difficulties.<sup>61</sup>

- **Dehydration can be deadly.**

Drinking water or food contaminated by fecal matter or disease-causing bacteria, viruses or parasites, contains microscopic organisms that multiply in the intestines and release toxins that cause vomiting and diarrhea. Left untreated, the resulting loss of water and electrolyte minerals such as sodium, potassium and chloride, can lead to severe dehydration and death.

- **An effective treatment for diarrheal diseases.**

Considered one of the most important public health breakthroughs of the 20th century, oral rehydration therapy (ORT) has saved the lives of millions of children. This simple solution of common household ingredients – salt, sugar and water – maintains hydration levels and prevents death.<sup>62</sup> ORT has saved an estimated 50 million lives at a cost of less than US\$0.30 per treatment.<sup>63</sup>

- **Child deaths due to diarrhea are preventable.** Improved access to safe water and proper sanitation, good hygiene practices such as hand washing, educating mothers on the benefits of breastfeeding for infant health, oral rehydration therapy, distributing zinc (a necessary micronutrient) and Vitamin A supplements, and providing vaccines against rotaviruses, are all ways to stop child deaths from diarrheal diseases.

### Singing a Public Health Message

In Singida, Tanzania, children in school health clubs at Kisaki Primary School have fun learning about sanitation through songs, games and drama.

Cholera and diarrheal diseases can mean days of missed school for sick children, School health clubs provide a way for children to educate their families and communities about good sanitation practices. A simple change in behaviour – washing hands with soap and water – can reduce diarrheal diseases by 40%.

Simple songs such as this are saving lives:

We can prevent diseases like cholera, bilharzia, and diarrhea.  
We have to get rid of them completely and wipe them out.  
We should not walk barefoot by water.  
We should boil water before drinking it.  
We should wash our hands after going to the latrine and before eating.  
Don't wash at the waterpoint.  
We can get rid of diarrhea.

Listen to the song at WaterAid, International site.

### Research, Think, Debate

Research: Find interesting examples of public health campaigns.

Think: In what ways does having access to public health education improve health?

Debate: Public health education is/is not the most important solution in fighting diarrheal disease.

### Additional Resources

Video: *Oral Rehydration Therapy* (1:40) [www.pbs.org/wgbh/rxforsurvival/series/video/d\\_dia1\\_dis\\_oralretherapy.html](http://www.pbs.org/wgbh/rxforsurvival/series/video/d_dia1_dis_oralretherapy.html)

Website: *ChildInfo: Diarrheal Disease* <http://www.childinfo.org/709.htm>

Document: *Diarrheal Disease: Solutions to Defeat a Global Killer* [http://www.eddcontrol.org/files/Solutions\\_to\\_Defeat\\_a\\_Global\\_Killer.pdf](http://www.eddcontrol.org/files/Solutions_to_Defeat_a_Global_Killer.pdf)

<sup>60</sup> Institute for One World Health. <http://www.oneworldhealth.org/causes> (2009)

<sup>61</sup> PATH. *Diarrheal Disease: Solutions to Defeat a Global Killer*, Washington, DC. [http://www.eddcontrol.org/files/Solutions\\_to\\_Defeat\\_a\\_Global\\_Killer.pdf](http://www.eddcontrol.org/files/Solutions_to_Defeat_a_Global_Killer.pdf)

<sup>62</sup> PBS, *Rx for Survival: Diarrheal Diseases*, [http://www.pbs.org/wgbh/rxforsurvival/series/diseases/diarrheal\\_diseases.html](http://www.pbs.org/wgbh/rxforsurvival/series/diseases/diarrheal_diseases.html) (2006).

<sup>63</sup> WHO, "WHO promotes research to avert diarrhea deaths", *WHO*, Mar 10, 2009.

# Fact Sheet 4

## Sanitation and Disease

*Sanitation engineers have accomplished more to improve health and save lives than all the medical doctors of the past 150 years.*

—Rx for Survival

- **At risk.** Of the 120 million children born in the developing world each year, half will be born into households with no access to improved sanitation facilities such as pit latrines or flush toilets. One fifth will not have access to improved water sources, such as covered wells.<sup>64</sup> 3,800 children die each day from diseases caused by unsafe drinking water and poor sanitation.<sup>65</sup>
- **Clean water means life.** Unsafe water is a breeding ground for disease. Water-related diseases include those caused by micro-organisms in drinking water, water-borne diseases (e.g. cholera), and vector-borne diseases (e.g. malaria-carrying mosquitoes). No other humanitarian intervention has a more dramatic effect on mortality rates than access to clean water and sanitation.
- **Poor hygiene and sanitation cause infection.** Intestinal infections caused by parasites are contracted through poor hygiene and sanitation and contaminated food or drinking water. Parasites consume nutrients, causing malnutrition and hindering a child's physical and mental development.
- **Regional disparities.** In most developed countries, more than 90% of the population has access to improved sanitation, compared to 50-56% in developing countries. Nearly 80% of the unserved population lives in Southern Asia, Eastern Asia and sub-Saharan Africa. More than one billion people, about one-sixth of the world's population, do not have access to safe drinking water. About 75% of them live in rural areas.<sup>66</sup>
- **Lack of sanitation slows achievement of the Millennium Development Goals.** The target by 2015 is 75% of people with access to improved water sources. Child and maternal health, universal primary education and environmental sustainability all require access to clean water and sanitation. Although 1.2 billion people gained access to improved water sources between 1990 and 2004, world population growth will leave 900 million without access by 2015. The problem is greatest in sub-Saharan Africa, where the unserved population will grow by 47 million.

### Safe Water, Safe Children

In Mataba, a village in the Eastern Democratic Republic of the Congo, getting clean water for households used to be a dangerous undertaking. Girls walked two hours to fetch water for their families, putting them at risk of being attacked, raped and abducted. They were also missing school and losing out on their education.

Today families in Mataba are benefitting from World Vision's Water, Sanitation and Hygiene (WASH) project. The health centre in Mataba gets funding from World Vision to help the doctors run the facility properly.

Taps have been installed in the area so women and children no longer need to walk two hours to the closest clean water point. The water in these taps is piped from springs five km away, and there are 15 water points along this pipe for people to access. The WASH project has also constructed 33 blocks of six latrines in and around Mataba.

The system of clean water is so successful that people from other villages are coming to use these taps and constantly ask when they can get taps in their own villages.

### Research, Think, Debate

Research: The difference between water-borne and vector-borne diseases and treatments.

Think: If you had limited access to good water or sanitation facilities, how would your daily life be affected?

Debate: Providing access to safe water and sanitation is/is not the most important intervention for reducing child mortality.

### Additional Resources

Video: *GOOD: Drinking Water* (3:08) [http://www.youtube.com/watch?v=\\_R\\_vpNQ0fJc&feature=channel](http://www.youtube.com/watch?v=_R_vpNQ0fJc&feature=channel)

Website: *UNICEF: Water, Sanitation and Hygiene* <http://www.unicef.org/wash/>

Audio: *CBC: The Current: Bindeshwar Pathak Feature* (25:21) <http://www.cbc.ca/thecurrent/2009/200904/20090406.html>

<sup>64</sup> UNICEF, *Progress for Children: A Report Card on Water and Sanitation*, [http://www.unicef.org/publications/files/Progress\\_for\\_Children\\_No.\\_5\\_-\\_English.pdf](http://www.unicef.org/publications/files/Progress_for_Children_No._5_-_English.pdf) (2006).

<sup>65</sup> World Vision Canada News Centre. *Water and Sanitation*. <http://www.worldvision.ca/About-Us/News-Centre/Advocacy/Pages/Water-and-Sanitation.aspx> (2009).

<sup>66</sup> World Health Organization and UNICEF. *Meeting the MDG Drinking Water and Sanitation Target*. [http://www.who.int/water\\_sanitation\\_health/monitoring/jmpfinal.pdf](http://www.who.int/water_sanitation_health/monitoring/jmpfinal.pdf) (2006).



# Fact Sheet 5

## Malaria

*We can rid the world of the scourge of malaria. We have the means. We often lack the political will.*

— Archbishop Desmond Tutu

- **Malaria has a “middle man.”** In the late 1890s, it was discovered that malaria is caused by the plasmodia parasite that lives inside mosquitoes. The parasite is transmitted to humans through the bite of an infected mosquito.<sup>67</sup>
- **Malaria is the fourth leading cause of child deaths.** More than 2,000 children under five – one child every 40 seconds – die from malaria each day.<sup>68</sup>
- **Undernourished children are the most vulnerable.** An estimated 57% of malaria deaths are attributable to underlying malnutrition.<sup>69</sup>
- **Malaria threatens the health of pregnant mothers and newborns.** Malaria is a prime cause of low birth weight, anemia and infant deaths. Every year more than 10,000 maternal deaths are caused by malaria.<sup>70</sup>
- **Malaria is preventable.** Preventing the mosquito bite prevents the disease. Approximately 99% of mosquitoes carrying the malaria-causing parasite bite at night. Sleeping under an insecticide-treated bed net and spraying insecticide inside homes is a simple way to prevent malaria.
- **Malaria is treatable.** The proper combination of drugs can effectively treat malaria. However, treatment efforts are being undermined by counterfeit drugs and growing drug-resistance among populations. As well, many communities lack the health facilities and access to drugs needed to treat malaria.

### Zeinabou's Story: Safe with Bed Nets

In Niger, Zeinabou is the eldest of six children. Originally there were seven.

At the age of 14, Zeinabou helps care for her younger siblings. She teaches them how to draw and solve math problems. She helps her mother fetch water, clean clothes, and sweep the house. But she will never forget that someone is missing.

“One of my brothers died. He died from malaria a long time ago,” she says. Zeinabou's brother, Issakou, was three years old when he died from malaria. With a high fever and the infection invading his small body, help couldn't come fast enough.

Zeinabou knows what malaria feels like. “I feel cold. I feel fever. I can't sleep because I get a headache. When I was sick, World Vision carried me to the clinic and bought medicine for me.” Her family has received other gifts from World Vision: food, goats, clothes, school supplies, and two mosquito nets to protect the entire family.

Zeinabou's mother says, “There is a change [since] before we got mosquito nets and now. When we didn't have mosquito nets, mosquitoes used to bite us, but now that we have them, they don't. Our health is better.”

Now Zeinabou sleeps easier knowing she and her siblings are protected. “It makes me happy,” she says.

### Research, Think, Debate

Research: The ban on DDT in industrialized countries. What makes DDT an effective insecticide?

Think: If global warming leads to malaria cases in Canada, should DDT be reintroduced to control mosquito populations? Why or why not?

Debate: Spraying of DDT should/should not be used to kill malaria-carrying mosquitoes in affected areas.

### Additional Resources

Video: *Kill or Cure? The World's Deadliest Diseases: Malaria* (13:11) <http://www.rollbackmalaria.org/multimedia/video.html>

Website: *Rollback Malaria* <http://www.rollbackmalaria.org/index.html>

Document: *WHO Malaria Fact Sheet* <http://www.who.int/mediacentre/factsheets/fs094/en/index.html>

<sup>67</sup> PBS, *Rx for Survival: Malaria*,

<http://www.pbs.org/wgbh/rxforsurvival/series/diseases/malaria.html> (2006).

<sup>68</sup> UNICEF, *State of the World's Children*, <http://www.unicef.org/sowc08/docs/sowc08.pdf> (2008).

<sup>69</sup> World Food Programme, *World Hunger Series 2007: Hunger and Health*,

[http://www.wfp.org/sites/default/files/World\\_Hunger\\_Series\\_2007\\_Hunger\\_and\\_Health\\_EN.pdf](http://www.wfp.org/sites/default/files/World_Hunger_Series_2007_Hunger_and_Health_EN.pdf) (2007).

<sup>70</sup> UNICEF, *ibid.*

# Fact Sheet 6

## Malnutrition

*Children must get the best possible start in life. Their survival, protection, growth and development in good health with proper nutrition are the essential foundation of human development.*

— A World Fit for Children, United Nations General Assembly

- **Malnutrition covers a broad range of nutritional problems.** *Stunting* is a chronic restriction of growth caused by insufficient nutrients and calories. *Wasting* (or *acute malnutrition*) is the result of rapid weight loss or a failure to gain weight. *Undernutrition* is associated with stunting and wasting caused by not enough micronutrients (vitamins and minerals), calories and proteins being consumed. *Overnutrition* is associated with obesity, caused by too many calories being consumed.
- **A simple diagnosis.** The mid-upper-arm-circumference tool (MUAC) is used to determine the severity of malnutrition in children aged six to 59 months. The circumference of the upper arm is measured with a paper band called the bracelet of life.<sup>71</sup>
- **Almost 20 million children suffer from severe acute malnutrition (SAM).** Most live in South Asia or sub-Saharan Africa. In children aged six to 59 months, an arm circumference less than 110 mm indicates SAM. It can be a direct cause of death, or an indirect cause, as it increases the chance of dying from preventable diseases such as diarrhea and pneumonia. Poverty, poor access to health care, and lack of education about healthy feeding all contribute to child malnutrition.<sup>72</sup>
- **Between 35-50% of all under-five deaths have malnutrition as an underlying cause.** Malnutrition weakens the immune system and increases the risk a child will die from premature birth, pneumonia, diarrhea, malaria, AIDS or other diseases.
- **Malnutrition can be prevented.** Ready-to-use therapeutic foods (RUTFs) such as peanut-butter based Plumpy'nut, are used to treat severe cases of child malnutrition. Education about proper nutrition and the benefits of breastfeeding, access to nutritious food and vitamin and mineral supplements, immunization of children and access to clean water and sanitation, are all important interventions for keeping malnutrition at bay.

### When Being Different is Good

*Positive Deviance (PD)* is based on the observation that in every community there are individuals or groups practicing uncommon behaviours resulting in solutions to challenging problems. These people are positive deviants: positive because they are doing something right, and deviants because they are behaving outside of the norms. They face the same challenges and have access to the same resources as their peers, but get results where others do not.

One example of PD in practice occurred in Vietnam in 1991. Jerry Sternin, the director in Vietnam for Save the Children, was studying how some families in poor communities managed to avoid malnutrition.

Sternin discovered that the caregivers in these families were collecting tiny shrimps and crabs from rice paddy fields and adding them, along with sweet potato greens, to their children's food. These foods were available to everyone, but other community members thought them inappropriate. The PD families were also feeding their children three or four times a day, instead of the customary two times.

The community developed an activity to teach others these uncommon feeding behaviours. The pilot project resulted in several hundred malnourished children being rehabilitated.

Source : Positive Deviance Initiative, [http://www.positivedeviance.org/about\\_pd/case\\_studies.html](http://www.positivedeviance.org/about_pd/case_studies.html) (2009).

### Research, Think, Debate

Research: The benefits of ready-to-use therapeutic foods and the Plumpy'nut patent controversy.

Think: Plumpy'nut is patented to be made only by Nutriset until 2018. Should humanitarian organizations be allowed to make their own version of Plumpy'nut?

Debate: Humanitarian interventions that can save millions of lives should/should not be free from patents.

### Additional Resources

Audio: World Vision Report: Peanut Butter Care (5:03) <http://www.worldvisionreport.org/Stories/Week-of-Nov-8-2008/Peanut-Butter-Care>

Website: Childinfo: Child Nutrition <http://www.childinfo.org/nutrition.html>

Document: World Vision: Nutrition and Health

[http://www.worldvision.ca/Programs-and-Projects/International-Programs/Documents/Nutrition\\_and\\_Health\\_web\\_v3\\_ICP-1230.pdf](http://www.worldvision.ca/Programs-and-Projects/International-Programs/Documents/Nutrition_and_Health_web_v3_ICP-1230.pdf)

<sup>71</sup> Print out a MUAC band at Doctors Without Borders:

<http://www.doctorswithoutborders.co.nz/education/activities/braceletoflife/braceletoflife-print.html>

<sup>72</sup> WHO. Community-Based Management of Severe Acute Malnutrition.

[http://www.who.int/child\\_adollescent\\_health/documents/pdfs/severe\\_acute\\_malnutrition\\_en.pdf](http://www.who.int/child_adollescent_health/documents/pdfs/severe_acute_malnutrition_en.pdf)

# Survive to Five

## Module I Role Play Cards

### Australia (Jack/Isabella)

- My birth weight was above 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic in my community
- I eat three meals a day
- My family often eats meat
- I was not breastfed as an infant
- There is clean water, a water tap and toilet in my home
- I attend school
- My mother is educated
- There is no malaria where I live
- Both my parents are alive
- Only my father is employed

### Afghanistan (Soraya)

- My birth weight was under 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic close to my community
- I eat only two meals a day
- My family eats mostly potatoes
- My mother was malnourished & could not breastfeed me
- There is access to clean water near my home
- My home neither has a water tap nor a toilet
- I am a girl and cannot attend school
- My mother is not educated
- There is no malaria where I live
- Both my parents are alive
- My older siblings work instead of going to school

### Brazil (Augusto/Maria)

- My birth weight was under 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic close to my community
- I eat only two meals a day
- My family sometimes eats meat
- I was breastfed as an infant
- My home has clean water and a water tap but no toilet
- I attend school
- My mother is not educated
- There is no malaria where I live
- My father died from AIDS
- Only my mother has a job

### Canada (Stephen/Caroline)

- My birth weight was above 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic in my community
- I eat three meals a day
- My family often eats meat
- I was breastfed as an infant
- There is clean water, a water tap and toilet in my home
- I attend school
- My mother is educated
- There is no malaria where I live
- Both my parents are alive
- Both my parents are employed

### China (Li/Ying)

- My birth weight was under 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is no health clinic in my community
- I eat only one meal a day
- My family sometimes eats meat
- My mother was malnourished and could not breast-feed me
- My home has clean water and a water tap but no toilet
- I attend school
- My mother was not educated
- There is no malaria where I live
- My mother died from AIDS
- My father does not have a job

### Dominican Republic (Juan/Gloria)

- My birth weight was under 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic close to my community
- I eat three meals a day
- My family sometimes eats meat
- I was breastfed as an infant
- My home has clean water, a water tap and a toilet
- I attend school
- My mother is not educated
- There is malaria where I live but I do not have a bed net
- Both my parents are alive
- Only my father has a job and my siblings need to work

# Survive to Five

## Module I Role Play Cards (cont'd)

### Ethiopia (Amina)

- My birth weight was under 2500 g (5.5 lbs)
- I did not receive any vaccination shots as an infant
- There is no health clinic in my community
- I eat only one meal a day
- My family eats mostly ground cassava root
- My mother was malnourished and could not breastfeed me
- There is no clean water, water tap or toilet in my home
- I am a girl and do not attend school
- My mother is not educated
- There is no malaria where I live
- My father died from AIDS
- My mother is not employed so I must work to help her

### France (Thomas/Mathilde)

- My birth weight was above 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic in my community
- I eat three meals a day
- My family often eats meat
- I was breastfed as an infant
- There is clean water, a water tap and toilet in my home
- I attend school
- My mother is educated
- There is no malaria where I live
- Both my parents are alive
- Both my parents are employed

### Haiti (Emmanuel/Johanne)

- My birth weight was under 2500 g (5.5 lbs)
- I did not receive any vaccination shots as an infant
- There is no health clinic in my community
- I eat only one meal a day
- My family eats mostly rice
- My mother was malnourished and could not breastfeed me
- There is no clean water, water tap or toilet in my home
- I do not attend school
- My mother is not educated
- There is malaria where I live and I have a bed net
- My father died from AIDS
- My mother is not employed so my siblings must work to help her

### India (Vikram/Priyanka)

- My birth weight was under 2500 g (5.5 lbs)
- I did not receive any vaccination shots as an infant
- There is no health clinic in my community
- Sometimes I go a day without eating
- My family eats mostly rice
- I was breastfed as an infant
- There is clean water near my home and a water tap but no toilet
- I attend school
- My mother is not educated
- There is no malaria where I live
- My mother died from AIDS
- My father is not employed so I must work to help him

### Japan (Hiroshi/Yoko)

- My birth weight was above 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic in my community
- I eat three meals a day
- My family sometimes eats meat
- I was not breastfed as an infant
- My home has clean water, a water tap and a toilet
- I attend school
- My mother is educated
- There is no malaria where I live
- Both my parents are alive
- Both my parents are employed

### Malawi (Chikumbu/Saliza)

- My birth weight was under 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is no health clinic in my community
- I eat only one meal a day
- My family eats mostly ground cassava root
- I was breastfed as an infant
- My home is near clean water and a water tap but does not have a toilet
- I do not attend school
- My mother is not educated
- There is malaria where I live but I have no bed net
- My father died from AIDS
- My mother is unemployed so my siblings work

# Survive to Five

## Module I Role Play Cards (cont'd)

### Mexico (Alejandro/Gabriela)

- My birth weight was above 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic close to my community
- I eat three meals a day
- My family eats mostly corn
- I was breastfed as an infant
- There is clean water, a water tap and toilet in my home
- I attend school
- My mother is educated
- There is no malaria where I live
- Both my parents are alive
- Only my father is employed

### Nicaragua (Ernesto/Talia)

- My birth weight was above 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic in my community
- I eat two meals a day
- My family eats mostly corn
- I was breastfed as an infant
- There is clean water, a water tap but no toilet in my home
- I attend school
- My mother is educated
- There is malaria where I live and I have a bed net
- Both my parents are alive
- Only my father is employed

### Niger (Hadiza)

- My birth weight was under 2500 g (5.5 lbs)
- I did not receive any vaccination shots as an infant
- There is no health clinic in my community
- I eat only one meal a day
- My family eats mostly ground cassava root
- I was not breastfed as an infant
- There is clean water near my home, but no water tap or toilet
- I am a girl and do not attend school
- My mother is not educated
- There is no malaria where I live
- Both my parents are alive
- Only my father is employed

### Peru (Andres/Cecilia)

- My birth weight was above 2500 g (5.5 lbs)
- I did not receive any vaccination shots as an infant
- There is a health clinic close to my community
- I eat only two meals a day
- My family sometimes eats meat
- I was breastfed as an infant
- My home has clean water and a water tap but no toilet
- I attend school
- My mother is not educated
- There is no malaria where I live
- Both my parents are alive
- Only my mother has a job

### Sierra Leone (Samuel/Mariama)

- My birth weight was under 2500 g (5.5 lbs)
- I did not receive any vaccination shots as an infant
- There is no health clinic in my community
- I eat only one meal every other day
- My family eats mostly ground cassava root
- I was not breastfed as an infant
- There is no clean water, water tap or toilet in my home
- I do not attend school
- My mother is not educated
- There is malaria where I live but I do not have a bed net
- Both my parents died from AIDS
- My siblings have to work instead of going to school

### South Africa (Mamello/Puleng)

- My birth weight was under 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic close to my community
- I eat only two meals a day
- My family sometimes eats meat
- I was breastfed as an infant
- My home has clean water and a water tap but no toilet
- I attend school
- My mother is not educated
- There is malaria where I live and I have a bed net
- Both my parents died from AIDS
- My older siblings must work

# Survive to Five

## Module I Role Play Cards (cont'd)

### **Sri Lanka (Kasun/Dilini)**

- My birth weight was under 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic close to my community
- I eat only two meals a day
- My family eats mostly rice
- My mother was malnourished and could not breastfeed me
- There is clean water and a water tap but no toilet near my home
- I attend school
- My mother was not educated
- There is malaria where I live and I do not have a bed net
- Both my parents are alive
- Only my father has a job

### **Tanzania (Endari/Amidah)**

- My birth weight was under 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic close to my community
- I eat only two meals a day
- My family sometimes eats meat
- I was breastfed as an infant
- My home has clean water and a water tap but no toilet
- I attend school
- My mother was educated
- There is malaria where I live but I do not have a bed net
- My mother died from AIDS
- My father is employed but my siblings also work

### **Uganda (Willy/Eseeri)**

- My birth weight was under 2500 g (5.5 lbs)
- I did not receive any vaccination shots as an infant
- There is no health clinic close to my community
- I eat only two meals a day
- My family sometimes eats meat
- I was breastfed as an infant
- My home has clean water and a water tap nearby but no toilet
- I attend school
- My mother was not educated
- There is malaria where I live and I have a bed net
- My mother died from AIDS
- My father is employed

### **Ukraine (Ivan/Katerina)**

- My birth weight was above 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic close to my community
- I eat three meals a day
- My family often eats meat
- I was breastfed as an infant
- My home has clean water, a water tap and a toilet
- I attend school
- My mother is educated
- There is no malaria where I live
- My father died from AIDS
- Only my mother has a job

### **United Kingdom (Daniel/Emma)**

- My birth weight was above 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic in my community
- I eat three meals a day
- My family often eats meat
- I was not breastfed as an infant
- There is clean water, a water tap and toilet in my home
- I attend school
- My mother is educated
- There is no malaria where I live
- Both my parents are alive
- Both my parents are employed

### **USA (Andrew/Julia)**

- My birth weight was above 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic in my community
- I eat three meals a day
- My family often eats meat
- I was breastfed as an infant
- There is clean water, a water tap and toilet in my home
- I attend school
- My mother is educated
- There is no malaria where I live
- Both my parents are alive
- Both my parents are employed

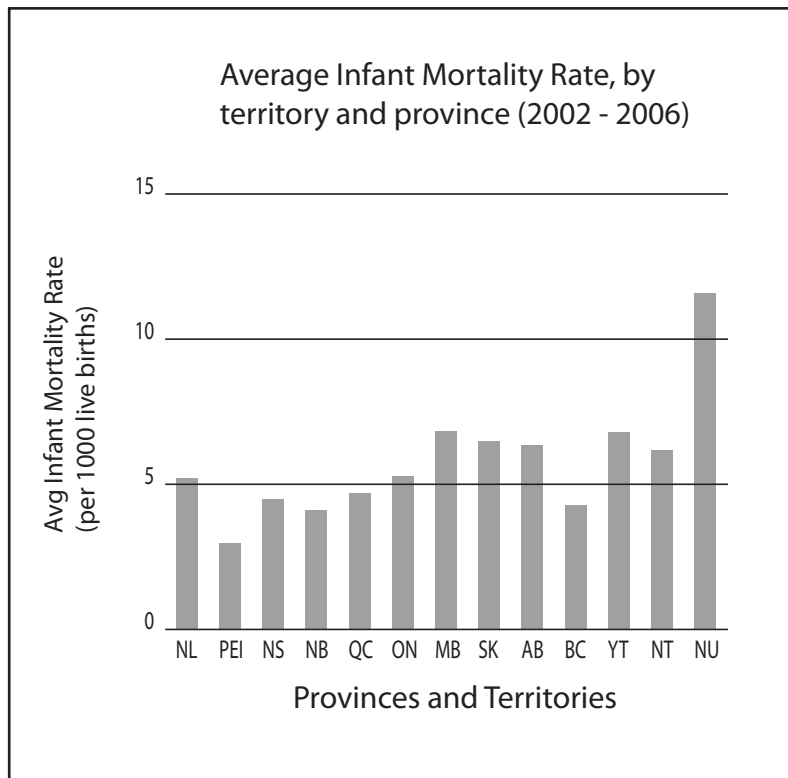
# Teacher Resource

## Module 3 Answer Key

Answers for *Infant Mortality in Canada* assignment (p. 30)

### Part 1

Average Infant Mortality Rate, by territory and province (per 1000 live births)	
NF	5.2
PEI	3.0
NS	4.5
NB	4.1
QC	4.7
ON	5.3
MB	6.9
SK	6.5
AB	6.4
BC	4.3
YT	6.8
NT	6.2
NU	14.1



### Analysis

1. The highest average infant mortality rates are in Nunavut (14.1), Yukon (6.8) and Manitoba (6.9). The lowest average infant mortality rates are in Prince Edward Island (3.0), New Brunswick (4.1) and British Columbia (4.3).
2. Answers will vary but may include geographic isolation, malnutrition, poor access or limited funding for healthcare, lack of parental education, discrimination, lack of political will, etc.

# Teacher Resource

## Module 3 Answer Key

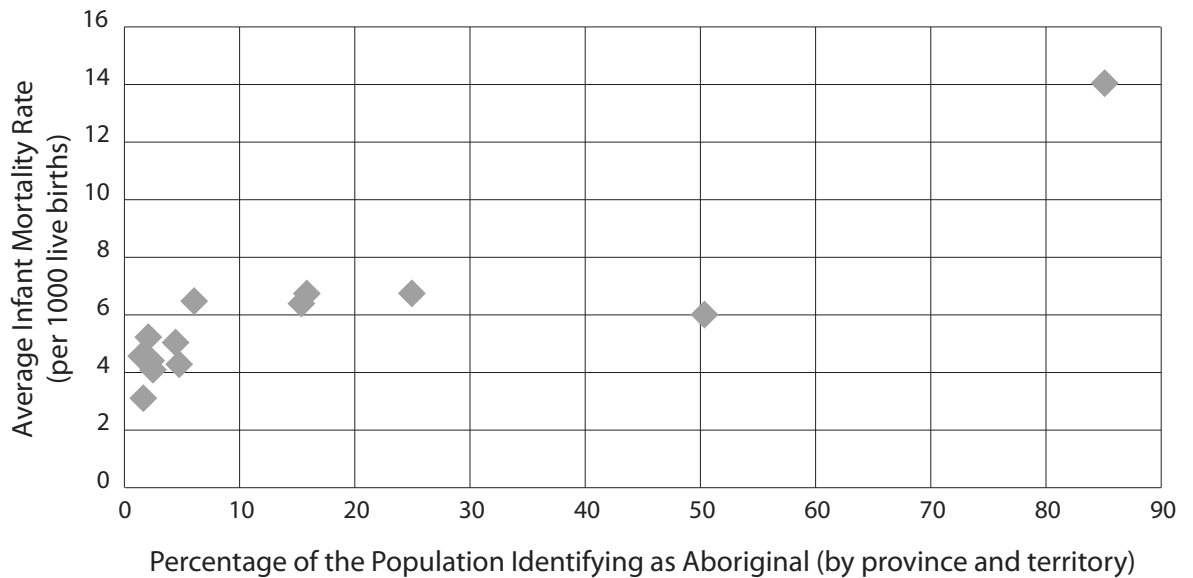
### Part 2

Percentage of each Provincial and Territorial population that identifies as Aboriginal (2006)	
NF	4.7
PEI	1.3
NS	2.7
NB	2.5
QC	1.5
ON	2.0
MB	15.5
SK	14.9
AB	5.8
BC	4.8
YT	25.1
NT	50.3
NU	85.0

### Analysis

1. The higher the proportion of residents who identify as Aboriginal, the higher the average infant mortality rate.
2. Answers will vary but may include lack of education for Aboriginal parents on proper feeding and care of infants; isolation on the reserves; limited access to quality healthcare; transportation issues; poor quality diet; drug and alcohol abuse by parents; social stigma, etc.

Analysing the Relationship between Infant Mortality Rate and Percentage of the Population Identifying as Aboriginal, by Canadian Province and Territory (2006)





# Teacher Resource

## Module 3 Answer Key

Answers for *Reducing Child Mortality* assignment (p. 32)

**Table 1.** Levels and trends in under-5 mortality (1990-2008)

Year	World-wide under-five deaths (in millions)	First Difference
1990	12.5	11.4 - 12.5 = -1.1
1995	11.4	10.4 - 11.4 = -1.0
2000	10.4	9.3 - 10.4 = -1.1
2005	9.3	8.9 - 9.3 = -0.4
2007	8.9	8.8 - 8.9 = -0.1
2008	8.8	

### Analysis

1. First differences tell us that this is not a perfect linear relationship. Under-five deaths are not dropping at a constant rate and we know this because the first differences at each interval vary. For the relationship to be linear all the first differences would need to be the same value.
2. The graph shows a negative or inverse relationship between under-five deaths and time: over time the number of under-five deaths decreases.
3. Based on the graph, under-five deaths will be approximately 8.2 million in 2010 and 7.2 million in 2015.
4. According to the above estimates, the world is not on track to reach the MDG4 target in 2015 of reducing child mortality by 2/3 of 1990 levels. A 2/3 reduction of 1990 levels would be:

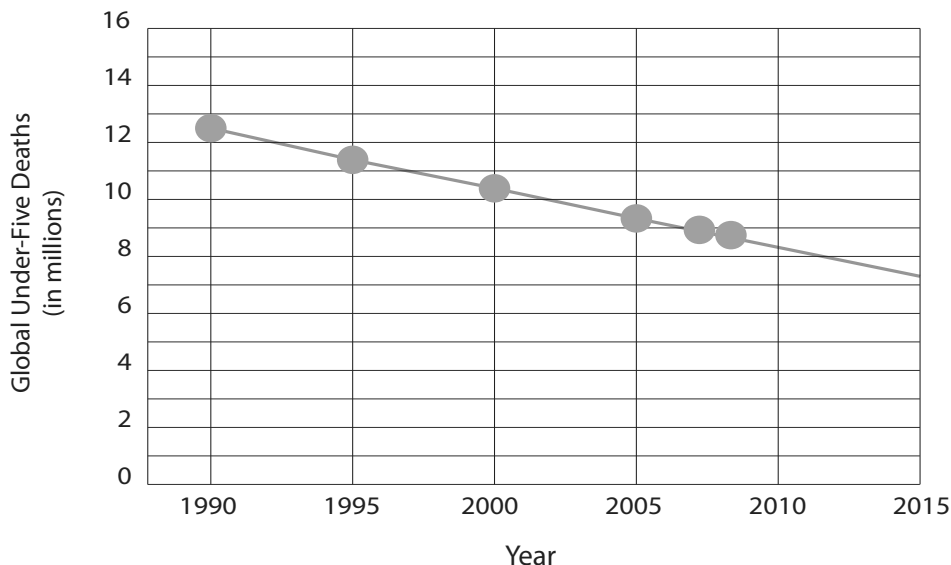
$$\frac{2}{3} \text{ (as a decimal = 0.666)} \times 12.5 \text{ million} = 8.25 \text{ million}$$

$$12.5 \text{ million} - 8.25 \text{ million} = 4.25 \text{ million}$$

To be on track we would need to see a projected 2015 estimate of 4.25 million on the graph. If trends in child mortality continue, our graph predicts child mortality will be approximately 7.2 million in 2015 – significantly off track to meet this Millennium Development Goal.

5. Answers will vary, but can include widespread immunization programs; improved access to clean water and sanitation; distribution of vitamin and mineral supplements; lower birth rates; and improved maternal healthcare.

Reductions in Under-Five Deaths Over Time (1990-2008)



# Alive at Five

## Glossary of Technical Terms

**Acute Respiratory Infection** is severe infection of the upper or lower respiratory system, such as pneumonia.

**Copenhagen Consensus** is a project that seeks to establish priorities for advancing global welfare based on the theory of welfare economics.

**Group of Eight (G8)** is an annual forum or summit meeting of the heads of states of the wealthiest nations of the world. The members are Canada, USA, United Kingdom, France, Italy, Germany, Japan, and Russia.

**Improved Sanitation Facilities** include flush toilets, pit latrines and composting toilets. Ideally they are private and not shared between households. They are hygienic and ensure no contact with human waste.

**Improved Water Sources** are protected from outside contamination, particularly from human waste. They include piped water into dwellings, public water taps, protected wells and collected rainwater or spring water.

**Malnutrition** develops when the body lacks the vitamins, minerals and other nutrients needed for healthy functioning. It can be caused by inadequate food intake, imbalance of nutrients or poor absorption of nutrients.

**Maternal Health** refers to the health of women during pregnancy, childbirth and the post natal period.

**Micronutrients** are vitamins and minerals needed in small daily quantities for healthy growth and metabolism.

**Mid-Upper Arm Circumference (MUAC)** is a measurement of the circumference of the upper arm at midpoint, used as a quick assessment of a child's nutritional status and upper arm wasting.

**Millennium Development Goals (MDGs)** are eight development goals agreed to by 189 UN member countries. The goals focus on reducing poverty and hunger, tackling ill-health, gender inequality, lack of education, lack of access to safe water and environmental degradation by the year 2015.

**Neonatal** refers to the newborn period which is the first four weeks (28 days) after birth.

**Oral Rehydration Therapy (ORT)** is the administration of special fluids by mouth to treat acute dehydration.

**Plumpy'nut** is a peanut-butter based ready-to-use therapeutic food used to treat severe malnutrition in children.

**Positive Deviance** is based on the observation that in every community there are certain "deviant" individuals or groups whose "abnormal" practices or behaviors result in a better solution to a prevalent problem than the behaviours of other community members with access to the same resources.

**Ready-to-Use Therapeutic Foods (RUTFs)** are foods designed for specific nutritional and therapeutic purposes.

**Stunting** is the chronic restriction of height growth for age, usually due to insufficient nutrient and caloric intake.

**Under Five Mortality Rate (U5MR)** is the probability, expressed as a rate per 1,000 live births, of a child born in a specific year to die before the age of five.

**Vector-borne Diseases** are transmitted to humans by insects or animals. This includes mosquitoes carrying the malaria parasite.

**Wasting** (also called severe or acute malnutrition) develops as a result of rapid weight loss or failure to gain proper weight for height.

**Undernutrition** is the outcome of insufficient food intake and repeated infectious diseases. It includes being underweight for one's age, too short for one's age (stunted), dangerously thin for one's height (wasted) and deficient in vitamins and minerals (micronutrient malnutrition).

# Alive at Five

## Further Resources

### Classroom Activities

Cancer Research UK. Youth and Schools Lesson Plan: Design Your Own Health Campaign. (2009)  
[http://publications.cancerresearchuk.org/WebRoot/crukstoredb/CRUK\\_PDFs/lessonplans/ys\\_lesson\\_healthcampaign.pdf](http://publications.cancerresearchuk.org/WebRoot/crukstoredb/CRUK_PDFs/lessonplans/ys_lesson_healthcampaign.pdf)

Landers, C. and S. Moger. Child Survival: A Global Challenge. UNICEF Educator's Guide. (2008)  
[http://youth.unicefusa.org/assets/pdf/teachunicef-youthreporhighschool\\_final.pdf](http://youth.unicefusa.org/assets/pdf/teachunicef-youthreporhighschool_final.pdf)

PBS. Rx for Survival: A Global Health Challenge: For Teachers. (2006)  
<http://www.pbs.org/wgbh/rxforsurvival/series/teachers/index.html>


### Online


Gapminder.org  
Engaging videos, interactive graphs and current statistics on child health and other development issues.  
[www.gapminder.org](http://www.gapminder.org)


World Vision Area Development Project Updates  
Learn more about World Vision's work to improve child well-being in specific countries.  
<http://www.worldvision.ca/ADP/Pages/Home.aspx>


World Vision Global Future. Child Health: Generating the Will. (Edition 2, 2009)  
This journal of essays by child health and political experts examines the actions needed to realize Millennium Development Goals 4 and 5.  
<http://www.globalfutureonline.org/PolicyAdvocacy/GlblFutr.nsf/issues/401A6B33CD90851F8825762600800041?OpenDocument>


### Media

 Video: Rx for Survival (series)  
Explore various health topics with this PBS series.  
<http://www.pbs.org/wgbh/rxforsurvival/series/video/index.html>

 YouTube Playlist: Millennium Development Goals – Student Videos  
Students participating in the first Global Model United Nations in August 2009 in Geneva were invited to submit short videos highlighting the progress being made in their countries, or globally, on one of the Millennium Development Goals.  
[http://www.youtube.com/view\\_play\\_list?p=09E8BC92A08D61B1&search\\_query=United+Nations+MDGs](http://www.youtube.com/view_play_list?p=09E8BC92A08D61B1&search_query=United+Nations+MDGs)

 Video: GOOD: The Motorcycle Doctors (2:46)  
An innovative strategy to reach rural communities in Zambia with primary healthcare.  
<http://www.good.is/post/the-motorcycle-doctors/>

 Flash Animation: World Vision: Water is Life (5:00)  
This riddle about water compares how it is perceived and used by different people.  
<http://www.worldvision.ca/Education-and-Justice/Educational-Resources/Pages/Water-and-the-Environment.aspx>

 Audio: CBC The Current: Child Welfare – Native Kids (15:00)  
One in 10 Canadian children live in poverty and many of those children live on reserves. It's being alleged these children do not have the same access to health care, education and other services as children living off reserves.  
<http://www.cbc.ca/thecurrent/2009/200911/20091123.html>

 Audio: World Vision Report  
World Vision Report podcasts about development issues around the world.  
[www.worldvisionreport.org](http://www.worldvisionreport.org)

# Alive at Five

The Silent Global Crisis of Child Deaths

Global Education, World Vision Canada

## Feedback Form

Your feedback is important to us as we strive to measure impact and improve our educational resources. Please fill out this form and fax or mail it to us. We appreciate any comments or suggestions.

**School:** \_\_\_\_\_ **City and Province:** \_\_\_\_\_

1. How did you learn about this resource?

\_\_\_\_\_

2. With what grade(s) and subject(s) did you use the resource?

\_\_\_\_\_

3. What was your objective in using the resource?

\_\_\_\_\_

4. Was this resource effective in helping you to meet your objectives?

\_\_\_\_\_

5. Please evaluate the resource according to the following criteria.

	(Poor)	1	2	3	4	(Excellent)
Overall quality of the resource		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Clarity of instructions		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Breadth and depth of subject matter covered		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Comments:

\_\_\_\_\_

\_\_\_\_\_

6. What component or activity did you find most useful?

\_\_\_\_\_

7. What did you find least useful?

\_\_\_\_\_

8. Please comment on the impact(s) that you perceive resulting from the use of this resource

(e.g. changed attitudes, actions taken by your group or yourself).

\_\_\_\_\_

\_\_\_\_\_

**Please provide your name and email address so we can add you to the World Vision Teacher Network. You'll receive up to six e-newsletters per school year about new resources and educational programs.**

**Name:** \_\_\_\_\_ **Email address:** \_\_\_\_\_

Please send this form, along with any comments, by mail or fax to:

**Education and Public Engagement**

World Vision Canada

1 World Drive, Mississauga, ON L5T 2Y4

Fax: 905-696-2166

Email: [global\\_ed@worldvision.ca](mailto:global_ed@worldvision.ca)



Thank you!

**World Vision** is a Christian relief, development, and advocacy organization dedicated to working with children, families, and communities to overcome poverty and injustice. As followers of Jesus, we are motivated by God's love for all people regardless of religion, race, ethnicity, or gender.

To support World Vision's work, visit [www.worldvision.ca](http://www.worldvision.ca) or call **1-800-268-1650**.

World Vision educational videos, publications, and classroom activities help Canadians develop a greater understanding of global issues so they can take action for social justice.

For more information on educational resources and programs, visit: [worldvision.ca/resources](http://worldvision.ca/resources)



or contact us at:  
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