

# UNIT 1: WHERE DO WE STAND?

## Unit Overview:

### In this Unit students will:

- Discuss the importance of development in the first five years of life;
- Define child survival and the under-five mortality rate — what it means, and how it is calculated;
- Become aware of the reasons why the under-five mortality rate is an indicator of a country's well-being;
- Compare and contrast the under-five mortality rates of various geographic regions;
- Appreciate the reasons for differences in child survival rates;
- Read and interpret tables, graphs, pie charts, and maps.

**Lesson 1:** In the opening activity, students reflect on the importance of the first five years of life for all later development. Students will spend some time thinking about what every child needs during this time in order to grow and thrive and begin school ready to learn. Following a brief introduction to the Child Survival Revolution, students will learn about the calculation of under-five mortality rates (U5MR) and why this statistic is such an important indicator of a country's commitment to children. Using real data, students will have opportunities to read and interpret graphs and charts as well as calculate changes in the child survival rates in different regions around the world.

**Lesson 2:** This lesson examines regions where child survival is still a pressing issue for many children. Through online research and small group work, students will select a country where child survival is a high priority. Using data from statistical tables, students will analyze key health, social, and economic factors contributing to the high number of deaths for children under five in their selected country. Through small group presentations, students will compare and contrast factors affecting the survival of young children and families in different regions.

# National Standards Unit 1

## ENGLISH LANGUAGE ARTS — Grades K–12

**Standard 1:** Students read a wide range of print and non-print texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment.

**Standard 7:** Students conduct research on issues and interests by generating ideas and questions, and by posing problems. They gather, evaluate, and synthesize data from a variety of sources (e.g., print and non-print texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience.

**Standard 8:** Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge.

## MATHEMATICS

### Mathematics Standards — Grades 9–12

#### **Standard 9: Connections**

In Grades 9-12 all students should recognize and apply mathematics in contexts outside of mathematics.

#### **Standard 10: Representation**

In Grades 9-12 all students should formulate, create, and use representations to organize, record, and communicate mathematical ideas.

## HISTORY/SOCIAL STUDIES/GEOGRAPHY

### World History Standards — Grades 5-12

#### **Era 9: The 20th Century Since 1945 — Promises and Paradoxes:**

Students will understand the search for community, stability, and peace in an interdependent world.

### Social Studies Standards — Grades K–12

**Strand III:** People, Places, and Environments

**Strand IX:** Global Connections

## Geography Standards — Grades K–12

*The Geographically Informed person knows and understands*

### The World in Spatial Terms

**Standard 1:** how to use maps and other geographic representations, tools and technologies to acquire, process, and report information from a spatial perspective

### Places and Regions

**Standard 4:** the physical and human characteristics of places

### Human Systems

**Standard 8:** the characteristics, distribution, and complexity of Earth’s cultural mosaic

**Standard 13:** how the forces of cooperation and conflict among people influence the division and control of the Earth’s surface

### Environment and Society

**Standard 14:** how human actions modify the physical environment

**Standard 16:** the changes that occur in the meaning, use, distribution, and importance of resources

## SCIENCE

### Science Content Standards — Grades 9–12

#### Content Standard F: Science in Personal and Social Perspectives

*Students should develop an understanding of*

Personal and community health

Science and technology in local, national, and global challenges

## HEALTH

### Health Education Standards — Grades 9–12

**Standard 1:** Students will comprehend concepts related to health promotion and disease prevention to enhance health.

**Standard 2:** Students will analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.

## UNIT 1:

# Lesson 1: Understanding Child Survival

Suggested Class Time: 50 minutes

## Objectives:

- Determine why the first five years of life are so critical;
- Define *child survival* and *under-five mortality rate (U5MR)*;
- Be able to define how the U5MR is calculated;
- Appreciate the U5MR as an indicator of a country's well-being.

## Session Plan:

- Opening Activity: The First Five Years of Life — 20 minutes
- Class Discussion Activity: Understanding the Under-Five Mortality Rate (U5MR) — 10 minutes
- Group Activity: Regional Variations in Child Survival — 20 minutes

## Vocabulary:

60 priority countries, donor, mortality, sub-Saharan Africa

## Materials Needed:

- Copies of the *Youth Report*, Chapter 1 and Glossary
- Copies of Handouts 1 and 2 for the whole class

## Opening Activity: The First Five Years of Life

### Directions

1. Explain to students that during the first five years a child grows and changes faster than at any other time of life. Ask students to recall their first day of kindergarten. Ask: What skills had you developed by the time you were ready for school?
2. Facilitate a general discussion by encouraging students to recall developmental skills learned in the first five years: physical (*walk, get dressed, brush teeth*) emotional (*trust, attachment, empathy*), social (*self-confidence, eagerness to learn, creativity, friendships*), language and thinking skills (*speaking complex sentences, recognizing letters, basic understanding of numbers, problem solving, asking questions*).

3. Distribute Handout 1. Review the list of essential skills with students. Ask: Are there any skills you would like to add? Were there any skills you were surprised to see listed? How did your family contribute to the development of these skills?
4. Direct students' attention to the front cover of the *Youth Report*. Ask:
  - How do families help children get ready for school?
  - How do communities help children get ready for school?
  - Why do many families and communities have trouble meeting the essential needs of young children?

## **Class Discussion Activity: Understanding the Under-Five Mortality Rate (U5MR)**

### **Background for Teachers**

The under-five mortality rate (U5MR) is a useful tool for measuring the health of children. The U5MR is known to be the result of a wide variety of factors: nutritional status and health knowledge of mothers; the level of immunization and oral rehydration therapy; the availability of mother and child health services; income and food availability; the availability of safe drinking water; and the overall safety of the child's environment, among other factors.

Another strength of the U5MR is that it tells us whether children under age five are actually benefiting from available nutritional and health resources. (If children are dying, they are not benefiting.) Often, health or nutritional status of a country is measured by the availability of resources such as food, doctors, or medicine. But just because resources are available doesn't mean that they are used.

The U5MR presents a more accurate, if far from perfect, picture of the health status of the majority of children.

### **Directions**

1. Prepare by having students read pages 2, 3, and 5 of the *Youth Report* before class. This will help familiarize them with UNICEF and the *Youth Report*.
2. Ask: What is the focus of the *Youth Report*? Remind students of the four bullet points on page 3 describing its content related to challenges and successes in child survival:
  - *What has been achieved*
  - *What has been learned*
  - *What actions must be taken*
  - *What you can do*
3. Review the concept of the "Child Survival Revolution" (page 5, paragraphs 2 through 4).

4. Introduce the under-five mortality rate (U5MR) as one of the ways in which UNICEF attempts to measure the progress of child survival in countries around the world. Define the under-five mortality rate (U5MR): The U5MR indicates the probability of dying between birth and exactly five years of age, expressed per 1,000 live births. It is a measure of child well-being in general and child health in particular.

 **Tip: Present this U5MR calculation problem to students: In a town of 5,261 people with a mortality rate of 5 per 1,000, how many children under the age of five will not survive? (26.31)**

## Group Activity: Regional Variations

### Background for Teachers:<sup>1</sup>

Far fewer children are dying today than in 1960. Over the past 46 years the annual number of child deaths has halved from roughly 20 million in 1960 to under 10 million in 2006. In a number of regions child mortality rates have declined since 1990. Child mortality rates have been cut roughly in half in East Asia and the Pacific, Central and Eastern Europe and the Commonwealth of Independent States, and Latin American and the Caribbean — bringing the under-five mortality rate for each of these regions below 30 per 1,000 live births in 2006.

Other regions are falling behind. The Middle East and North Africa region has seen steady progress in reducing rates but still had an under-five mortality rate of 46 per 1,000 live births in 2006. This is equivalent to 1 in every 22 children dying before age five. South Asia is making progress. Sub-Saharan Africa remains the most troubling area. In 2006, 49 percent of all deaths of children under age five occurred in sub-Saharan Africa, despite the fact that only 22 percent of the world's children are born there. In this region, on average, 1 in every 6 children dies before age five. The region as a whole has shown the least progress since 1990, managing to reduce child mortality by only 14 percent between 1990 and 2006.

### Directions

1. Divide the class into six groups, one for each of the regions defined in the chart on page 6 of the *Youth Report*. The groups represent: sub-Saharan Africa; Middle East/North Africa; South Asia; East Asia/Pacific; Latin America/Caribbean; and the Central and Eastern Europe/Commonwealth of Independent States (CEE/CIS).
2. Ask each group to identify how many under-five deaths occurred in their region in 2006. Then ask them to calculate what percentage of the global under-five deaths in 2006 (9.7 million) that figure represents?  
(Example: sub-Saharan Africa:  $4.8/9.7 \times 100 = 49.48\%$ )

---

<sup>1</sup> *The State of the World's Children 2008*. UNICEF, 2007. pp. 6-7

3. Ask students to review the graph on page 7 of the *Youth Report*, “Trends in Child Mortality.” Have students in each group describe the trend for their region since 1960. Ask: How do child mortality trends in your region compare to those in industrialized countries?
4. Distribute Handout 2. Ask each group to calculate the percentage decrease in the U5MR for their region between 1990 and 2006, using the information on Handout 2.
5. Group presentations: Ask a member of each group to briefly describe the main trend and percentage decrease found in the group’s assigned region. Students should fill in the chart on Handout 2 and answer the questions based on each group’s presentations.

## **Extension Activity 1: Experience Early Childhood Education**

### **Directions**

1. Explain that helping children get ready for school is an important job of early childhood teachers. For over 40 years, the Head Start program has helped prepare millions of children in the U.S. for kindergarten.
2. Encourage students to learn more about early childhood education by observing a classroom, interviewing an educator, or volunteering in a classroom.
3. In each case, students should be prepared to discuss their findings.

## **Extension Activity 2: Alternative Presentations**

Ask students to generate alternative presentations for the data on pages 6 and 7 of the *Youth Report*. Encourage them to consider PowerPoint presentations; graphs made out of three-dimensional materials; and short videos. Students can compare and contrast the effectiveness of the different visual representations.

### Off to School: Five Categories of School Readiness

A wealth of research has shown that a child's readiness for school includes the following five separate but connected categories of development.<sup>2</sup>



#### Physical Well-Being and Motor Development

This category covers factors such as health, growth; physical abilities including the skills for using both large motor (walking) and small (hands) motor development.



#### Social and Emotional Development

This category combines social development (children's ability to interact with others and their capacity for self control) with emotional development (children's perceptions of themselves, their abilities to understand the feelings of other people, and their ability to interpret and express their own feelings).



#### Approaches to Learning

This category refers to children's inclination to use skills and knowledge. Key components include enthusiasm, curiosity and persistence in tackling tasks.



#### Language Development

This category includes communication and early literacy. Communication includes listening, speaking, and vocabulary. Early literacy includes awareness of print stories, early writing and the connection of letters to sounds.



#### Thinking and General Knowledge

This category refers to thinking and problem-solving as well as knowledge about objects and the way the world works. Mathematical knowledge, abstract thought, and imagination are included.

<sup>1</sup> Getting Ready. Findings from The National School Readiness Indicators Initiative: A 17 State Partnership. Prepared by Rhode Island Kids Count. February 2005.

## HANDOUT 2

### Understanding the U5MR

The table below shows the under-five mortality rate (U5MR) per 1,000 births in various regions and among industrialized countries in 1990 and 2006. By 2006, for the first time since these records were kept, the total number of children in the world who died before their fifth birthday fell below 10 million — to 9.7 million.

#### Directions

Using **sub-Saharan Africa** as an example, compute the “decrease” and “approximate percentage decrease” for the other regions listed.

Region	U5MR 1990	U5MR 2006	Decrease	Approximate % Decrease
<b>Sub-Saharan Africa</b>	187	160	$187-160=27$	$27/187 \times 100=14\%$
<b>Middle East/ North Africa</b>	79	46		
<b>South Asia</b>	123	83		
<b>East Asia/ Pacific</b>	55	29		
<b>Latin America/ Caribbean</b>	55	27		
<b>CEE/CIS*</b>	53	27		
<b>Industrialized Countries</b>	10	6		
<b>World</b>	93	72		

Source: United Nations Children’s Fund, *Progress for Children: A World Fit for Children Statistical Review*, UNICEF, New York, December 2007, p. 18.

Answer these questions, based on the information on the chart:

1. Which region had the lowest U5MR in 1990? 2006?
2. Which region had the highest U5MR in 1990 and 2006?
3. Which two regions had the highest percentage decrease in U5MR between 1990 and 2006?
4. Where do you think additional intervention by UNICEF is most needed? Why?
5. What are some conclusions you can make from looking at this chart?
6. Why is this information important?

## UNIT 1:

# Lesson 2: A Look at the Data

**Suggested Class Time: 60 minutes**

## Objectives:

- Compare and contrast rates of under-five child mortality by geographic regions in order to understand the reasons for the differences;
- Read and interpret tables, graphs, pie charts, and maps.

## Session Plan:

- Opening Activity: Causes of High Child Mortality Rates — 10 minutes
- Group Activity: Factors Affecting Child Mortality in Selected Countries — 50 minutes

## Vocabulary:

60 priority countries, demographics, mortality, sub-Saharan Africa

## Materials Needed:

- Copies of the *Youth Report*, Chapter 1 and Glossary
- Copies of Handout 4 for the whole class
- Internet Access UNICEF, Information by Country—<http://www.unicef.org/infobycountry>

## Opening Activity: Causes of high child mortality rates

### Directions

1. Write the question: “Why do many children under age five die in developing countries?” on the board for students to see when they enter the classroom. Ask students to brainstorm some of the reasons. Encourage students to think about specific causes often related to poverty such as “poor nutrition” or “lack of access to medical care.”
2. Refer students to the bulleted list on page 9 of the *Youth Report* that includes some of the reasons why child mortality rates are still so high in many developing countries. Ask students if they can think of any other factors that might contribute to high child mortality rates in a given region or country.

## Group Activity: Factors Affecting Child Mortality in Selected Countries

### Directions

1. Present the following information to students:

In 2005, UNICEF and its partners identified 60 countries as priorities for child survival programs. The selection was based on two criteria: countries with more than 50,000 deaths of children under five and countries with an annual under-five mortality rate of at least 90 per 1,000 live births.

More than 90 percent of the world's children live in these 60 countries. Sub-Saharan Africa, encompasses 38 countries out of the 60 priority countries, is of greatest concern. Although only 22 percent of all children are born in sub-Saharan Africa, the region accounts for 49 percent of all the under-five deaths in the world.

2. Divide the class into seven groups, one for each of the regions identified on page 8 of the *Youth Report* (Latin American/Caribbean; Eastern and Southern Africa; West and Central Africa; Middle East and North Africa; CEE/CIS; South Asia; East Asia/Pacific).
3. Ask students in each group to select one priority country from their region. (The 60 countries are listed by region on page 8.). Distribute Handout 4. Using the "information by country" section of UNICEF's website: <http://www.unicef.org/infobycountry>, students can review the background information and highlight main issues facing children in that country. Students should focus their information-gathering on factors contributing to the high number of deaths for children under five in their country. Students can select relevant indicators from each of the following categories: Nutrition, Health, HIV/AIDS, Education, Demographics, Economics, Women, and Child Protection.
4. Ask each small group to make a brief presentation on the major factors that threaten the survival of children in their selected country.
5. Encourage students to be creative in their presentations. For example, suggest they use charts, tables, and figures to highlight the main issues affecting child mortality in their country.

## Extension Activity: Geography of Regions

### Directions

1. Divide the class into seven groups and have each group choose one of the seven regions listed on page 8.
2. Have the groups investigate the general geographic features of their regions and discuss the following questions:
  - What do the countries in this region have in common?
  - How do they differ?
  - Is there a correlation between a country's geographic features and its rate of child mortality?

## Call to Action: Create a Child Survival Bulletin Board

Create a child survival bulletin board. Use tables, charts, and maps to highlight the global trends in U5MR and successful child survival efforts designed to reach children living in the most difficult circumstances. Where has there been success, and where should greater effort be focused?

The bulletin board can be virtual or actual — on a website or on the wall of a school, library, or youth center. The information can be updated periodically. For child survival facts to include on your bulletin board, use the *Youth Report* and visit UNICEF's child info website at: [http://www.childinfo.org/survival\\_health.html](http://www.childinfo.org/survival_health.html) for the latest data on child survival and health.

