

KINGDOM OF CAMBODIA
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Ministry of Health
National Maternal and Child Health Center

National Policy

on the Control of Acute Respiratory Infection and Diarrheal
Disease among Children Under the Age of Five

**National Acute Respiratory Infection and
Control of Diarrheal Disease Program**

Revised November 2011

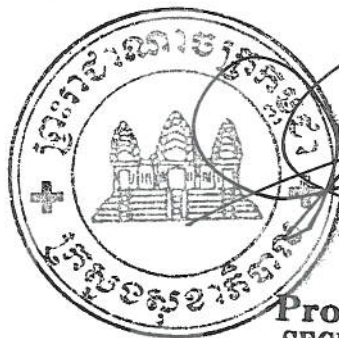
FOREWARD

The Ministry of Health continues to enhance efforts to reduce childhood morbidity and mortality due to pneumonia and diarrhea, the first- and second-leading cause of childhood illness and death among children under five in the country by improving access to quality health care and proven interventions. Paying greater attention to these two issues will be key to sustaining Cambodia's success at achieving Millennium Development Goal 4—a reduction in child mortality to 65 deaths per 1,000 live births.

This policy related to acute respiratory infections and diarrheal disease, with a focus on childhood pneumonia and diarrhea, establishes a basis for curbing the burden of these diseases and reflects Ministry of Health prioritization of these issues. This document presents case management practices, prevention activities, surveillance and reporting systems and evaluation methodologies for the two illnesses. It also serves as instruction and guidance for all health care providers, relevant departments and programs, and health development partners for the prevention and treatment of pneumonia and diarrhea in Cambodia.

The Ministry of Health asks for health staff at all levels to implement this policy, and for managers at all levels of the National Acute Respiratory Infection and Control of Diarrheal Disease Program to oversee this implementation, in order to reduce child morbidity and mortality in an effort to reach Millennium Development Goal 4 by 2015. *D. S. S. S.*

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- Department of Communicable Disease Control, Ministry of Health
- National Child Survival Management Committee, Ministry of Health
- National Immunization Program, Ministry of Health
- National Nutrition Program, Ministry of Health
- Technical Working Group for Acute Respiratory Infection and Diarrhea Prevention Control
- United Nations Children's Fund
- World Health Organization

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ACRONYMS

ARI	Acute Respiratory Infection
CDC	Department of Communicable Disease Control
CDD	Control of Diarrheal Disease
CDHS	Cambodia Demographic and Health Survey
CSMC	Child Survival Management Committee
CMS	Central Medical Store
CPA	Complementary Package Activities
GAPP	Global Action Plan for Prevention and Control of Pneumonia
HC	Health Center
HIS	Health Information System
IEC	Information, Education and Communication
IMCI	Integrated Management of Childhood Illness
MoH	Ministry of Health
MPA	Minimum Package Activities
NIP	National Immunization Program
OD	Operational District
ORS	Oral Rehydration Salts
ORT	Oral Rehydration Therapy
PHD	Provincial Health Department
UNICEF	United Nations Children's Fund
VHSG	Village Health Support Group
WHO	World Health Organization

1. Introduction

Childhood pneumonia and diarrheal disease are the two leading causes of morbidity and mortality among children under five throughout the world. The World Health Organization (WHO) estimates that as of 2010, pneumonia kills approximately 1.6 million children every year while diarrheal disease accounts for 15 percent of deaths among children under five years of age, which equals approximately 1.3 million deaths per year.^{1,2}

1.1 Pneumonia

In response to the high number of deaths due to pneumonia, WHO and the United Nations Children's Fund (UNICEF) have set forth prevention and treatment strategies in the Global Action Plan for Prevention and Control of Pneumonia (GAPP). This plan aims to guide effective treatment and prevention of pneumonia through promotion of the scale-up of the following:³

1. Managing pneumonia cases through the use of integrated management of childhood illnesses (IMCI) at all levels of the health system
2. Improving vaccination coverage
3. Improving nutritional status and reducing low birth weight
4. Controlling household air pollution
5. Preventing and managing HIV infection

1.2 Diarrheal disease

WHO and UNICEF have also set up a seven-point diarrhea plan⁴ which includes:

1. Fluid replacement to prevent dehydration
2. Zinc treatment
3. Rotavirus and measles vaccinations
4. Promotion of early and exclusive breastfeeding and vitamin A supplementation
5. Promotion of hand washing with soap
6. Improved water supply quantity and quality
7. Community-wide sanitation promotion

The Ministry of Health (MoH) acknowledges that these low-cost proven interventions have demonstrated effectiveness in reducing the burden of disease among children under five and therefore prioritizes the prevention, management, and treatment of childhood pneumonia and diarrhea to decrease the morbidity and mortality rates among children in Cambodia.

2. Context

In December 1998, the National Acute Respiratory Infection and Control of Diarrheal Disease Program (National ARI/CDD) was established by the MoH. This program created the country's first integrated policy on the control of acute respiratory infection (ARI), which included pneumonia, diarrheal disease, and cholera. In 2000, the National Program was instrumental in the introduction and implementation of the IMCI approach and provided technical support to all related activities. In 2007, the protocols for the management of diarrhea with low-osmolarity oral rehydration salts (ORS) and zinc were updated through IMCI and the National ARI/CDD Program. This updated policy aims to ensure that formal policy guidance is aligned with, and supportive of, ongoing programmatic implementation and reflects recent advances in the prevention and treatment of childhood pneumonia and diarrheal disease.

cook indoors and that over 90% are using wood for cooking. This is likely to be exposing a significant number of young children to dangerous air pollution.

2.3 Treatment

Given the prevalence of Hib and *Streptococcus pneumoniae*, current WHO recommendations for empiric antibiotic treatment of childhood pneumonia, as codified in Cambodia's IMCI ARI treatment protocols, are appropriate for Cambodia.

Continued feeding and increased fluid intake are important interventions for the management of mild diarrhea. However, the 2010 CDHS indicates that only approximately one-third of children under five with diarrhea are being given increased fluids. To complement increased fluid intake, the MoH encourages the use of low-osmolarity ORS and zinc, in line with treatment recommendations from WHO/UNICEF⁴ and outlined in Cambodia's IMCI guidelines. According to data from the CDHS 2010 report, however, only 34.1% children with diarrhea were given ORS and less than 3% received zinc.⁵ Access to these treatment options remains an issue, particularly at the community level and within the private sector. Knowledge of their importance, particularly of zinc, is also limited both within the community and among health care providers.

3. Policy goal

This policy aims to support and facilitate acceleration of achievements towards the reduction of under-five morbidity and mortality due to pneumonia and diarrheal disease.

4. Policy strategies

Strategies recommended by WHO and UNICEF to prevent, manage, and treat childhood pneumonia and diarrhea will be integrated to maximize impact and the effective and efficient use of resources. Specific interventions to be sustained and further scaled-up in Cambodia include:

- Promotion of early and exclusive breastfeeding
- Improvement of childhood nutrition
- Increasing vaccine coverage rates for childhood immunizations and introducing the rotavirus vaccine
- Promotion of hand-washing
- Reduction of household air pollution
- Increasing access to sanitation and safe drinking water
- Community education on appropriate home care and referral practices
- Rational use of antibiotics
- Increasing access to ORS and zinc

To achieve the goal of this policy, the cross-cutting strategies employed shall include:

- Strengthen program management for childhood pneumonia and diarrheal disease prevention and treatment at all levels
- Ensure quality case management for childhood pneumonia and diarrheal disease through capacity building of health workers at all levels
- Improve access to childhood diarrheal disease and pneumonia treatment options by strengthening drug supply and logistics
- Enhance community health promotion for the prevention and treatment of childhood pneumonia and diarrheal disease
- Improve the quality of reporting and surveillance of pneumonia and diarrhea

4.3.2 Diarrhea treatment:

The mainstay of treatment to correct dehydration is low-osmolarity ORS plus zinc, in alignment with WHO recommendations, and promoted through Cambodia's IMCI treatment protocols. Low-osmolarity ORS and zinc tablets are part of the essential drug list and are, therefore, available at all public health facilities.

Generally, antibiotics do not add any benefit in the treatment of most cases of diarrhea. The standard treatment recommended by WHO and National program is ORS plus zinc, to complement increase fluid intake. According to updated IMCI guidelines, children with bloody diarrhea (dysentery) may be prescribed an appropriate antibiotic.

Patients with suspected cholera must be given ORS and zinc before being referred to appropriate treatment sites, where CDC and WHO treatment guidelines should be followed.¹⁰ Further guidance on the treatment of suspected cholera cases is available from the MoH.

4.3.3 Increase availability of ORS and zinc at the community level:

At the end of routine outreach activities, it is recommended that outreach teams from health centers leave all remaining ORS sachets, zinc tablets, and information, education, and communication (IEC) materials with VHSG, particularly in the most remote villages, in an effort to increase availability of pre-referral treatment of severe cases of diarrhea. Private pharmacies will also be encouraged to sell low-osmolarity ORS and zinc at a reasonable profit for home use.

4.3.4 Supplies and logistics:

The logistics management system must be strengthened to ensure availability and sustain supplies of ARI and diarrhea treatment products (antibiotics, ORS, and zinc) in the catchment area of health facilities.

Management of the supply chain of drugs and other equipment will remain the responsibility of CMS through its regular distribution mechanisms. In order to avoid stock outs or shortages, the PHD and OD supervisors must conduct inventory checks accordingly to CMS policy, before the quarterly logistic report and request are submitted at all levels.

An ORS and zinc distribution plan will be developed to secure a stable supply of both ORS and zinc at all public health facilities.

4.4 Enhanced community health promotion

Health promotion activities at the community level will leverage existing interventions for strengthening prevention of childhood pneumonia and diarrheal disease by improving awareness of mothers. VHSG networks will be leveraged and regular education efforts by health staff during outpatient and inpatient visits will continue.

Prevention messaging will include:

- Early warning signs of ill health requiring timely health seeking behavior: difficulty or rapid breathing (with chest in-drawing); convulsions; not feeding at all, or serious difficulty feeding;
- Promotion of early and exclusive breastfeeding, particularly in the first six months of life, complementary feeding for the children older than six months of life and during sickness during and after pneumonia and diarrhea as appropriate.
- Increased fluid intake in order to prevent dehydration when diarrhea starts and by providing ORS and zinc tablets as recommended to all children under 5 with diarrhea;

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