

(WP)HSE/DHP/07
Report Series No.: RS/2010/GE/04(PHL)

English only

REPORT

WORKSHOP ON PREVENTION OF CHILDHOOD
DROWNING IN SOUTH-EAST ASIAN COUNTRIES

Convened by:

WORLD HEALTH ORGANIZATION
REGIONAL OFFICE FOR THE WESTERN PACIFIC

Manila, Philippines
23 to 25 March 2010

Not for sale

Printed and distributed by:

World Health Organization
Regional Office for the Western Pacific
Manila, Philippines

15 June 2010

NOTE

The views expressed in this report are those of the participants in the Workshop on Prevention of Childhood Drowning in South-East Asian Countries and do not necessarily reflect the policies of the World Health Organization.

This report has been prepared by the World Health Organization Regional Office of the Western Pacific for the participants in the Workshop on Prevention of Childhood Drowning in South-East Asian Countries, which was held in Manila, Philippines, from 23 to 25 March 2010.

CONTENTS

	<u>Page</u>
SUMMARY	
1. INTRODUCTION	- 1 -
1.1 Background information	- 1 -
1.2 Objectives	- 1 -
1.3 Participants.....	- 2 -
1.4 Organization.....	- 2 -
1.5 Opening remarks	- 2 -
2. PROCEEDINGS	- 3 -
2.1 Summary of papers	- 3 -
2.2 Country reports	- 6 -
2.3 Summary of group discussions on data collection	- 8 -
2.4 Developing country-specific next steps	- 9 -
3. CONCLUSIONS.....	- 11 -
3.1 Acquiring new knowledge in childhood drowning prevention	- 11 -
3.2 Identifying the next steps for developing country-specific action plans for prevention of childhood drowning	- 12 -

ANNEXES:

ANNEX 1 - LIST OF PARTICIPANTS, RESOURCE PERSONS, REPRESENTATIVES, OBSERVERS AND SECRETARIAT	
ANNEX 2 - PROGRAMME OF ACTIVITIES	
ANNEX 3 - LIST OF DOCUMENTS	
ANNEX 4 - OPENING REMARKS	

Keywords:

Drowning-prevention and control / child / Asia, Southeastern
--

SUMMARY

The Workshop on Prevention of Childhood Drowning in South-East Asian Countries was conducted in Manila, Philippines from 23 to 25 March 2010 by the World Health Organization.

The workshop was attended by 17 participants from Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Maldives, the Philippines, Singapore, Thailand and Viet Nam and 15 representatives and observers from various organizations, including The Alliance for Safe Children, International Life Saving Federation, Safe Kids Worldwide, and the United Nations Children's Fund (UNICEF).

The objectives of the workshop were:

- (1) to acquire new knowledge in the areas of:
 - (a) development of data collection systems,
 - (b) monitoring and utilization of data on child drowning, and
 - (c) implementation and monitoring of evidence-based interventions to prevent childhood drowning; and
- (2) to identify the next steps for developing country-specific action plans for prevention of childhood drowning.

Presentations were made on the following: global overview on drowning, building partnerships for drowning prevention, lessons learnt in drowning prevention in Asia, issues in data collection, designing interventions for drowning prevention, capacity-building for drowning prevention, and situation of childhood drowning in participating countries. Group work and discussions focused on data collection and next steps in developing country-specific interventions for childhood drowning prevention.

The workshop participants arrived at the following conclusions:

- (1) Regarding drowning data, the major sources of data on drowning are vital statistics, health facilities, surveys and other agencies. The major causes of under-reporting are lack of reporting systems (including equipment, trained staff and funding), inconsistent reporting, lack of definition/standardization and mis-coding. In addition, there is weak data interpretation and sharing of data among agencies. It is important to obtain qualitative data including community's perception to interventions, and their swimming skills and practices.
- (2) A drowning prevention programme needs to be developed with content experts and in conjunction with the community. Strategies, which include supervision of children, barriers to water bodies, setting up of crèches, swimming lessons and teaching of water survival skills, need to be designed and adapted to the local environment. Close supervision, appropriate ratio of trainers to trainees, evaluation and quality assurance are crucial in survival swimming programmes.

(3) Other strategies for drowning prevention include avoidance of overcrowding of boats and ferries, availability of adequate and certified life jackets in boats and ferries, availability of lifeguards on beaches, disaster preparedness and response and restriction of sale of alcohol to youth.

The following themes emerged as priority next steps in countries: strengthening quantitative and qualitative data collection from health and non-health sources; identifying risk factors for drowning; developing age, context and environment specific interventions; rigorous monitoring and evaluation; and cross-sectoral collaboration for interventions. Other themes that were identified were capacity-building, raising awareness within government and the population at large, development of specific drowning prevention national policy and strengthening emergency response to drowning.

1. INTRODUCTION

1.1 Background information

Drowning is a leading cause of death in children aged 5 to 14 years in the Western Pacific Region. An estimated 56 000 children under 15 years of age die from drowning every year in the Region. Aside from the significant number of deaths, there is a very substantial health burden due to non-fatal cases of drowning, with one to four cases of non-fatal drowning requiring hospitalization for every fatal drowning. Disability is an important consequence of near-fatal drowning among children, and is due principally to severe neurological deficits with long-term consequences.

The *World Report on Child Injury Prevention*, launched by WHO and UNICEF in 2008, called for Member States to step up efforts in child injury prevention to enhance child survival. It recommended the integration of child injury prevention into child health and development activities. Implementing this recommendation, particularly in low- and middle-income countries will require enhanced capacity.

The Regional Framework for Action on Injury and Violence Prevention 2008–2013, which aims to guide key regional stakeholders on recommended actions in the area of injury prevention, has identified drowning prevention as a priority issue for the Region. In 2009, WHO collaborated with select countries on drowning-prevention activities.

Two priorities have emerged in advancing drowning prevention in low- and middle-income countries in South-East Asian countries. One is the establishment of data collection systems that provide insight into the magnitude of the problem and risk factors for drowning. The other is the adaptation and implementation of evidence-based interventions. In many South-East Asian countries, the capacity to act on both of these priorities is very limited.

Both of these priorities will be addressed in the workshop, which will bring together public health professionals responsible for drowning-prevention activities in South-East Asian countries. This workshop will provide an opportunity to learn new knowledge as well as to share experiences.

1.2 Objectives

- (1) To acquire new knowledge in the areas of:
 - (a) development of data collection systems,
 - (b) monitoring and utilization of data on child drowning, and
 - (b) implementation and monitoring of evidence-based interventions to prevent childhood drowning.
- (2) To identify the next steps for developing country-specific action plans for prevention of childhood drowning.

1.3 Participants

The workshop was attended by 17 participants who are responsible for developing the national programme on drowning prevention and data systems for injury/drowning from Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Maldives, the Philippines, Singapore, Thailand and Viet Nam. There were 15 representatives and observers from various organizations, including The Alliance for Safe Children, International Life Saving Federation, Safe Kids Worldwide, and UNICEF. The Secretariat consisted of seven WHO staff members. A list of participants, resource persons, representatives, observers and Secretariat members is given in Annex 1.

1.4 Organization

The workshop programme is given in Annex 2 and a list of documents distributed during the workshop is in Annex 3. The documents included country reports and other handout material.

The workshop was chaired by Dr Juanita A. Basilio of the National Center for Disease Prevention and Control, Department of Health, Philippines. The Vice-Chairperson was Dr Nguyen Trong An, Deputy Director, Administration for Child Care and Protection, Ministry of Labour, Invalids and Social Affairs, Viet Nam. The Rapporteur was Dr Anbumalar Ramiah, Senior Manager, Youth Health Division, Health Promotion Board, Singapore.

The technical sessions of the workshop started with a global review of drowning and presentations on building partnerships and lessons in drowning prevention in Asia. Participants then presented the magnitude of childhood drowning and status of child drowning prevention in their countries.

The second day started with a presentation and group discussions on issues with data collection. Presentations on designing interventions followed the group discussions. These activities achieved the first second objective of the workshop.

The third day started with a presentation on capacity-building. Participants then identified the next steps for developing country-specific plans for prevention of childhood drowning through group discussion. These activities addressed the second objective of the workshop.

1.5 Opening remarks

Dr Shin Young-soo, WHO Regional Director for the Western Pacific, welcomed the participants to the workshop. He stated that about 56 000 children under 15 years of age die from drowning every year in the Western Pacific Region. This makes drowning one of the leading causes of childhood deaths in the Region. The Millennium Development Goal 4 calls for a two thirds reduction in under-5 mortality by 2015. Governments have made great progress in preventing communicable diseases and improving child nutrition. Nevertheless, efforts to prevent injuries, including drowning, need to be enhanced. The United Nations Convention of the Rights of the Child, ratified by almost all governments, states that all children have a right to a safe environment and to protection from injury and violence. Safeguarding these rights is a challenge, but it can be achieved through concerted effort.

The World Report on Child Injury Prevention called for renewed efforts in child injury prevention by Member States as a means of improving child survival. Implementing this recommendation, particularly in low- and middle-income countries, where the problem of childhood drowning is most pressing, will require enhanced capacity. This need will be

addressed in this workshop, with the sharing of latest knowledge, technical experience and lessons learnt.

Dr Shin stressed that, given the complexity of childhood drowning, prevention requires a holistic approach, based on circumstances and particular patterns observed in each country. Strategies, such as the building of safe bridges, installation of safe water supply, building of barriers at pools, ponds and other bodies of water, covering of wells and use of personal floatation devices are effective in reducing drowning in children. The challenge comes in incorporating these ideas into new and existing housing environments. Innovative cost-effective and sustainable community-based projects are needed.

WHO will continue to cooperate with partners such as UNICEF, the International Life Saving Federation, Safe Kids Worldwide, and the Alliance for Safe Children to achieve the common goal of preventing drowning among children. Wishing participants fruitful discussions, Dr Shin declared the workshop officially open.

2. PROCEEDINGS

2.1 Summary of papers

2.1.1 Global overview of drowning

Dr David R. Meddings, Medical Officer, Violence and Injury Prevention and Disability, WHO Headquarters, Geneva, presented an overview of the magnitude of drowning. An estimated 388 000 people drowned globally in 2004. The South-East Asian and Western Pacific Regions accounted for 26% and 36% of global drowning cases in 2004, respectively. Males were about twice more likely to drown than females. More than 10 million disability adjusted life years (DALYs) were lost due to drowning in 2004. He stated that an estimated 175 000 children below the age of 20 years drowned in 2004 globally. The overwhelming majority, 98% of these childhood drowning deaths, occurred in low- and middle-income countries, usually in lakes, ponds and rivers, and especially in rural areas. Children under the age of five years are at most risk. The principles of drowning prevention include removing the hazard, creating barriers, protecting those at risk, and limiting the damage. The role of the health sector in drowning prevention is to collect data on mortality and morbidity; to study exposure and risk, and protective factors; to advocate for greater resources for drowning prevention; to promote prevention through policy and programmes; to monitor and evaluate interventions; and to strengthen emergency response to drowning.

2.1.2 Building partnerships for drowning prevention

Mr Justin Scarr, Chair, Child Drowning Committee, International Life Saving (ILS) Federation, presented the importance of building partnerships at community, national and regional levels. The ILS leads, supports and partners with national and international organizations committed to drowning prevention, aquatic safety supervision, emergency response and sport. The ILS has worked with local partners to implement demonstration projects in Bangladesh, Thailand and Viet Nam. It is organizing an international conference on drowning prevention in Danang, Viet Nam, in 2011.

2.1.3 Lessons learnt in drowning prevention in Asia

Dr Aminur Rahman, Member, ILS Research Committee, presented the lessons learnt in the Asian context. He stressed that it is important to obtain quantitative data as well as qualitative data on drowning. Qualitative data include those on the community's perception to interventions, and their swimming skills and practices. Risk factors include lack of supervision, exposure to natural bodies of water and inability to swim. Drowning in children mainly occur during daytime and peak during rainy season and disasters. The following broad strategies are currently available for the different child age groups: 8–18 months – playpens; 18 months to 4 years – crèches or nurseries; 4–10 years months – SwimSafe lessons; 5–17 years – safe school approach. The drowning prevention programme needs to be developed with content experts and in conjunction with the community. If necessary, barriers to water bodies have to be designed and adapted to the local environment. Rigorous monitoring, evaluation and quality assurance are crucial aspects of the programme. Close supervision and appropriate ratio of trainers to trainees is also crucial in SwimSafe programmes. About 50 000 children from 4 to 10 years of age have undergone SwimSafe programme in Bangladesh from 2006 to 2009. The curriculum was locally developed and the instructors recruited and trained at the community level. Ponds were modified for this purpose. Some major concerns were the availability of suitable ponds and quality of water. Details of the evaluation of the programmes in Bangladesh will be available by the end of 2010. Preliminary results are encouraging.

2.1.4 Issues in data collection

Dr Michael Linnan, Technical Director, The Alliance for Safe Children (TASC), highlighted the gross under-reporting of drowning in Asia. Drowning usually occurs in the community and is rarely treated since victims usually succumb quickly. Hence, these cases are not captured in data from health facilities. According to TASC surveys, injury (both fatal and non-fatal, including drowning) was a leading cause of death and disability in children up to 18 years. While communicable diseases and under-nutrition have been addressed effectively, injury, especially drowning remained a major cause of death in children below five years of age. Data on drowning should be accurate, representative and comprehensive. There has been a gradual decline in incidence in drowning over the decades in some countries, probably due to urbanization. Studies have shown some protection from drowning by children's ability to swim (as assessed by using a standard story of a potential drowning situation). He emphasized that there may be some drowning cases in children taught to swim. Hence, it is important to standardize and certify both the swimming lessons and the instructors.

2.1.5 Designing interventions for drowning prevention

Mr Justin Scarr facilitated the plenary discussion on designing interventions for drowning prevention. The following table is a summary of the interventions designed for different ages.

Age	Key interventions	Entry points for interventions
Under 1 year	<ul style="list-style-type: none"> • Education of parents on supervision practices including checklists for injury prevention • Covering of water containers (buckets, pails) and wells Modification of home environments including barriers to bodies of water • Usage of playpens for infants 	<p>Village health workers and volunteers</p> <p>Integrate with antenatal and postnatal care</p> <p>Parenting courses</p>

1–4 years	<ul style="list-style-type: none"> • Supervision of children in day care, kindergarten • Covering of wells and containers of water • Environmental modification including barriers to water bodies • Life jackets for use in boats 	<p>Social/welfare ministries</p> <p>Local authorities</p> <p>Transport/maritime authorities</p>
5–14 years	<ul style="list-style-type: none"> • Survival swimming lessons • Teacher supervision for outdoor activities • Safety in school environment and recreational activities • Education on drowning prevention for children and parents 	<p>Education/social/agencies/nongovernmental organizations (NGOs)</p>
Over 15 years	<ul style="list-style-type: none"> • Survival swimming lessons • Basic rescue/resuscitation skills • Restriction of use and sale of alcohol • Occupational safety for fishing activity • Education on drowning prevention 	<p>Education/social/labour/trade/consumer/agencies/NGOs</p>

For all groups, the following strategies are important:

- a national policy on drowning prevention;
- development of standards for swimming lessons, appropriate legislation and enforcement;
- disaster and emergency preparedness and response; and
- medical care, resuscitation for near drowning cases.

Survival swimming lessons should be governed by the following:

- Safety should be of utmost importance in developing curriculum.
- An optimum ratio of instructors to trainees should be maintained at all times.
- Trainers should be registered and provided with regular re-training and feedback.
- The programme should be rigorously monitored and evaluated, with feedback provided to stakeholders.

The role of the health sector is as follows:

- advocacy for childhood drowning prevention through policy, resource mobilization, relevant legislation and enforcement;
- collaboration with all relevant sectors for surveillance, intervention, monitoring and evaluation;
- partnership with other sectors for emergency preparedness and response;
- development of guidelines, standards and tools;
- training for resuscitation and rescue; and
- integration of childhood drowning activities into existing programmes.

2.1.6 Building capacity for drowning prevention

Dr D Meddings presented the WHO capacity-building plan for violence and injury prevention (VIP). Capacity-building consists of development of human resources (knowledge and skills) as well as institutional/infrastructural capacity. WHO has developed the following for capacity-building in violence and injury prevention: TEACH-VIP (including e-learning), MENTOR-VIP, and short courses. The second edition of TEACH-VIP was launched in 2010 and is available for e-learning.

2.1.7 UNICEF's experience in Bangladesh and China

Dr Shumona Shafinaz, from UNICEF, Bangladesh, and Mr Xu Zhu, from UNICEF, China, presented the UNICEF experience in Bangladesh and China. UNICEF has collaborated with many local agencies in developing policy, supporting surveys, and implementing interventions, including educational programmes for mothers and children. UNICEF has integrated child drowning prevention activities with other child and adolescent health care programmes.

2.2 Country reports

2.2.1 Cambodia

According to the Cambodia Accident and Injury Survey 2007, more than 4000 children died from injury in 2006. Drowning causes 55% of all injury deaths and is the leading cause of death in children aged 1 to 4 years. The vast majority of drowning cases occur in the home or the near vicinity. Wells, ponds, lakes, rivers, water containers, swimming pools and the seaside are the most frequent locations where drowning occurs. Risk factors include non-supervision of children and falls from boats. The Government has established both hospital-based and community-based injury surveillance systems. A pilot drowning intervention programme was implemented in Kampung Chhnang.

2.2.2 Indonesia

Drowning is under-reported in Indonesia. Most of the victims die before they can reach a health facility. An injury surveillance system is lacking. There is no qualitative data on community perception to drowning. Some private schools have swimming lessons for children. Laws exist for use of life jackets for use in commercial boats. There is a need to develop the infrastructure to collect data.

2.2.3 Lao People's Democratic Republic

The Lao People's Democratic Republic has no data on child injuries (including drowning). Attempts are currently being made to document drowning deaths in a province through verbal autopsy method.

2.2.4 Malaysia

Data on drowning are available from the National Informatics Centre of the Ministry of Health, Statistics Department, and the media. Drowning is the tenth most common cause of unintentional injury among those admitted to Ministry of Health hospitals. According to the Life Saving Society of Malaysia, a total of 295 deaths were attributed to drowning in 2006–2007, as reported in the media. Most of the cases occurred at sea and one third involved children below 10 years of age.

There are no specific programmes for prevention of drowning in Malaysia. Current activities are scattered and are carried out on a small scale. The Life Saving Society conducts swimming lessons for the public.

2.2.5 Maldives

Data on drowning are limited and available from police. The Swimming Association of Maldives conducts survival swimming lessons for the public. The Coast Guard and police provide information on drowning prevention to students.

2.2.6 Philippines

Data on drowning are available from the National Epidemiology Centre of the Ministry of Health, Philippines National Injury Survey 2003, Maritime Industry Authority, Philippines Coast Guard, and the media. According to the Philippines National Injury Survey 2003, drowning is the leading cause of death in children and adolescents aged between 1 and 17 years. Drowning rates are higher in males compared to those in females. Of special concern is the contribution of maritime disasters to drowning. Overall, data on drowning are inadequate.

Maritime laws and regulations exist for availability of life jackets on boats. Enforcement of these laws needs to be strengthened. Two community-based pilot projects on drowning prevention are being implemented in Pangasinan. The Philippines Life Savers, Red Cross and other bodies provide swimming lessons.

2.2.7 Singapore

There were 22 cases of drowning deaths in 2008. Of these, two occurred in children and adolescents up to 19 years of age. The Ministry of Community Development, Youth and Sports (MCYS) formed a Water Safety Council in 2007. The council, comprising of members from various government and nongovernmental agencies, initiates and coordinates water safety activities. It promotes education and research, and establishes water safety standards. The council has developed codes of practice for design and maintenance of aquatic facilities and swimming pools, and comprehensive volunteer lifeguard programme for unmanned beaches. The Singapore Sports Council is working with the local universities to develop an injury repository.

2.2.8 Thailand

Drowning was the leading cause of death in children less than 15 years of age in 2007. Males are more affected than females. About half of the drowning occurs in natural bodies of water like canals, agricultural land and rivers. Since 2006, the Ministry of Health has embarked on a policy-driven programme, which includes surveillance, mass education on drowning, swimming lessons, and capacity-building. The Bureau of Noncommunicable Diseases, Ministry of Health, is the secretariat for the National Child Drowning Prevention Committee, which comprises representatives from many relevant government and nongovernmental agencies. In recent years, there has been a slight decline in the number of child drowning deaths in Thailand and a detailed evaluation of the programme and activities is being planned.

2.2.9 Viet Nam

In 2007, 3786 drowning deaths occurred in children aged 0–19 years (10.4/100 000 children). According to the National Health Survey in 2002, drowning is the leading cause of death in the 1–14 year age group. A National Policy on Accident and Injury Prevention was promulgated in 2001. An interdisciplinary plan on child injury prevention was developed in 2009 with the Ministry of Labor, Invalids and Social Affairs as the focal ministry. Activities for drowning prevention include mass education, use of fences and barriers, swimming lessons and rescue training.

2.3 Summary of group discussions on data collection

The participants were divided into two groups to discuss the current situation in collection of data on drowning and recommendations to improve data collection. The groups reported on the results of their discussions at a plenary session.

The major sources of data on drowning are:

- vital statistics – death certificates;
- health facilities – clinic and hospital-based data, coroners' reports, dedicated injury surveillance systems;
- surveys – demographic, health, multiple indicator cluster; and
- other agencies – maritime, Coast Guard, disaster reports, media reports.

Major causes of under-reporting are:

- lack of reporting systems, including equipment, trained staff and funding;
- inconsistent reporting;
- lack of definition and standardization; and
- miscoding.

In addition, there is weak data interpretation and sharing among agencies.

2.4 Developing country-specific next steps

The participants and Secretariat members were divided into nine country-specific groups to discuss the next steps for developing interventions in each country. The groups reported on their action plans at a plenary session.

2.4.1 Cambodia

The next steps for Cambodia include:

- expansion of pilot interventions to 10 communes;
- use of environmental barriers, playpens and crèches for drowning prevention in young children;
- raising community awareness on drowning prevention;
- teaching resuscitation and rescue to older children, volunteers, etc.; and
- collaborating with the Ministry of Education, local authorities and nongovernmental organizations for interventions.

2.4.2 Indonesia

The next steps for Indonesia include:

- stakeholders' meeting among health, education, maritime and fishing, social welfare and island authorities to review existing policy and strategy related to drowning prevention;
- advocacy and education through the media for raising awareness of the issue;
- development of capacity among all sectors;
- integration of drowning prevention activities into child health programmes; and
- introduction of survival swimming lessons for older children.

2.4.3 Lao People's Democratic Republic

The next steps for the Lao People's Democratic Republic include the following:

- obtaining data on drowning from health facilities, community and special surveys;
- use of verbal autopsy method to pilot surveillance system;
- establishing a mechanism to coordinate activities of all sectors;
- raising community awareness in drowning prevention;
- development of barriers to bodies of water; and
- introduction of survival swimming lessons for older children.

2.4.4 Malaysia

The next steps for Malaysia include:

- obtaining information on drowning from various agencies to assess burden, risk factors and swimming skills among children;
- mapping out current efforts, guidelines and policies by health and other sectors;
- forming a working group to identify gaps in interventions and areas to be strengthened; and
- developing partnerships with other ministries to initiate interventions on drowning prevention.

2.4.5 Maldives

The next steps for Maldives include:

- obtaining data on drowning from the Ministry of Health and other sources;
- strengthening the capacity of the Swimming Association to conduct survival swimming lessons to the public; and
- establishing partnerships with the Coast Guard and other agencies.

2.4.6 Philippines

The next steps for Philippines include:

- improving data collection from hospitals and other sources;
- advocacy for drowning prevention through education;
- expanding interventions to areas with high drowning rate in collaboration with key local stakeholders; and
- establishing partnerships (including capacity-building) with all relevant stakeholders.

2.4.7 Singapore

The next steps for Singapore include:

- enhancing the volunteer lifeguard programme;
- developing a targeted programme for the community;
- establishing partnerships with schools, private agencies, day-care centres, instructors, etc.;
- building capacity for resuscitation and rescue; and
- monitoring and evaluating programmes.

2.4.8 Thailand

The next steps for Thailand include:

- advocacy for legislation for barriers and fences to bodies of water;
- developing warning labels for water containers;
- expanding resuscitation programmes and safe communities projects;
- setting up drowning prevention committees in all provinces;
- monitoring and evaluating survival swimming programmes;
- incorporating drowning prevention into disaster preparedness in communities;
- integrating child drowning prevention into mother and child health programmes; and
- promoting research into child drowning.

(9) Viet Nam

The next steps for Viet Nam include:

- strengthening coordination of committee;
- expanding safe home, school and community programme;
- improving data collection on drowning;
- integrating child drowning prevention into child health programmes; and
- building capacity for drowning prevention at all levels.

3. CONCLUSIONS

The workshop participants arrived at the following conclusions:

3.1 Acquiring new knowledge in childhood drowning prevention

3.1.1 The major sources of data on drowning are vital statistics, health facilities, surveys and other agencies (maritime, Coast Guard, disaster reports, media reports). The major causes of under-reporting are lack of reporting systems (including equipment, trained staff and funding), inconsistent reporting, lack of definition/standardization and miscoding. Data on drowning should be accurate, representative and comprehensive.

3.1.2 A drowning prevention programme needs to be developed with content experts and in conjunction with the community. Strategies, which include supervision of children, barriers to water bodies, setting up of crèches, swimming lessons and teaching of water survival skills, need to be designed and adapted to the local environment. Close supervision, appropriate ratio of trainers to trainees, evaluation and quality assurance are crucial in survival swimming programmes.

3.1.3 Other strategies for drowning prevention include avoidance of overcrowding of boats and ferries, availability of adequate and certified life jackets in boats and ferries, availability of lifeguards on beaches and restriction of sale of alcohol to youth.

3.2 Identifying the next steps for developing country-specific action plans for prevention of childhood drowning

3.2.1 Participating countries are different in terms of magnitude of the problem of child drowning; availability of data reporting systems, policies, plans and interventions; and involvement of various agencies

3.2.2 Participants discussed and set forward a variety of next steps for developing country-specific action plans upon return to their countries. There was overlap in terms of thematic direction. The following themes emerged as priority next steps: strengthening quantitative and qualitative data collection from health and non-health sources; identifying risk factors; developing interventions that are specific to age, context and environment; rigorous monitoring and evaluation; and cross-sectoral collaboration for interventions. Other themes that were identified were capacity-building, raising awareness within the government and the population at large, development of specific drowning prevention national policy, and strengthening emergency response to drowning.

LIST OF PARTICIPANTS, RESOURCE PERSONS,
REPRESENTATIVES, OBSERVERS AND SECRETARIAT

PARTICIPANTS

Cambodia

Dr Khuon Eng Mony
Deputy Director
Preventive Medicine Department
Ministry of Health
151-153 Boulevard Kampuchea Krom
Phnom Penh
Cambodia
Telephone: 855 12 862033
Fax: 855 23 427956
Email: monykhemara@yahoo.com

Dr Prak Piseth Raingsey
Director
Preventive Medicine Department
Ministry of Health
151-153 Boulevard Kampuchea Krom
Phnom Penh
Cambodia
Telephone: 855 12 862022
Email: pisethsey@yahoo.com

Indonesia

Dr Erna Mulati
Head of Sub Directorate
Under Five and Pre School Health
Child Health Directorat
DG Community Health
JL. HR. Rasuna Said Blok X-S, Kav 4-9
Kuningan
Jakarta Selatan 12950
Indonesia
Telephone: +6221-5214891
Fax: +6221-5214891
Email: erna_mlt@yahoo.com

Dr Esti Widiastuti
Head
Counselling and Evaluation Section
Injury Sub Directorate
Noncommunicable Disease Directorate
DG CDC-EH
Jl. Percetakan Negara No. 29
Jakarta Pusat 10560
Indonesia
Telephone: +6221-4247608
Fax: +6221-4200944
Email: estiarutomo@yahoo.co.id

Lao People's Democratic
Republic

Dr Somchith Akkhavong
Deputy Director General
Department of Hygiene and Prevention
Ministry of Health
Vientiane
Lao People's Democratic Republic
Telephone: 980 1754
Email: svilayract@yahoo.com

Dr Phisith Phoutsavath
Chief
Hospital Management Division
Department of Health Care
Ministry of Health
Vientiane
Lao People's Democratic Republic
Telephone: 856 20 5527721
Email: Psavath@gmail.com

Malaysia

Dr Rosnah Ramly
Senior Principal Assistant Director
Disease Control Division
Ministry of Health Malaysia
Level 6, Block E10, Complex E
Federal Government Administrative Centre
62590 Putrajaya
Malaysia
Telephone: +603-8883 4115
Fax: +603-8888 6277
Email: drrosnah.ramly@moh.gov.my

Dr Rosila Yahaya
Principal Assistant Director
Family Health Development Division
Ministry of Health Malaysia
Level 7 & 8, Block E10, Complex E
Federal Government Administrative Centre
62590 Putrajaya
Malaysia
Telephone: +603-8883 4105
Fax: +603-8888 6175
Email: drrosila@moh.gov.my

Maldives

Mr Ismail Ali
Leading Teacher
Imadduddin School
Rehendhi Hingun
Malé
Republic of Maldives
Telephone: +960 3323429
Fax: +960 3314206
Email: ism0017@hotmail.com

Philippines

Dr Juanita A. Basilio
Medical Officer VII
National Center for Disease Prevention and Control
Department of Health
Rizal Avenue, Santa Cruz
Manila 1003
Philippines
Telephone: (63 2) 749 9006
Fax: (63 2) 711 7846
Email: nitz_basilio@yahoo.com

Dr Agnes B. Segarra
Medical Officer VII
National Epidemiology Center
Department of Health
Rizal Avenue, Santa Cruz
Manila 1003
Philippines
Telephone: (63 2) 781 2843, 743 8301 Local 1901-1904
Fax: (63 2) 781 8843
Email: agnes.segarra@yahoo.com
agnesbenegas@gmail.com

Singapore

Ms Chia Siew Kwan
Manager, Sports Safety
Singapore Sports Council
230 Stadium Boulevard
Singapore 397799
Telephone: +65 6500 5432
Fax: +65 6346 1752
Email: chia_siew_kwan@ssc.gov.sg

Dr Anbumalar Ramiah
Senior Manager
Youth Health Division
Health Promotion Board
3 Second Hospital Avenue
Singapore 168937
Telephone: (0) 65-6435 3402
Fax: (0) 65-6435 8226
Email: Anbumalar_Ramiah@hpb.gov.sg

Thailand

Miss Pensri Chitnumsap
Public Health Technical Officer
Bureau of Epidemiology
Department of Disease Control
Ministry of Public Health
Tivanond Road
Nonthaburi 1100
Thailand
Telephone: (66 2) 590 3354
Fax: (66 2) 590 3337
Email: 2000pen@gmail.com

Mrs Suchada Gerdmongkolgan
Public Health Technical Officer
Bureau of Non-Communicable Diseases
Department of Disease Control
Ministry of Public Health
Tivanond Road
Nonthaburi 1100
Thailand
Telephone: (66 2) 590 3967
Fax: (66 2) 590 3968
Email: jew_suchada@hotmail.com

Socialist Republic of Viet Nam

Dr Nguyen Trong An
Deputy Director
Administration for Child Care and Protection
Ministry of Labour, Invalids and Social Affairs
No. 35 Tran Phu Street
Ha Noi
Viet Nam
Telephone: +84 4 37478425
Fax: +84 4 37478719
Email: antrongcpfc@gmail.com

Dr Nguyen Thi Lien Huong
Chief
Occupational Health-Injury Prevention Division
Viet Nam Administration of Preventive Medicine
Ministry of Health
Alley 135 Nui Truc
Ba Dinh District
Ha Noi
Viet Nam
Telephone: +84 4 37366349
Fax: +84 4 37260237
Email: huongtl_nguyen@yahoo.com

RESOURCE PERSONS

International Life Saving (ILS)
Federation

Dr Aminur Rahman
Member, ILS Research Committee
Technical Director
Centre for Injury Prevention and Research, Bangladesh
House B 162, Lane 23, New DOHS, Mohakhali
Dhaka 1206
Bangladesh
Telephone: +880-2-8814988
Email: aminur61@hotmail.com

Mr Justin Scarr
Chair, ILS Child Drowning Committee
Chief Operating Officer
The Royal Life Saving Society Australia
P.O. Box 558 Broadway
New South Wales 2007
Australia
Telephone: +61 2 8217 3112
Fax: +61 2 8217 3199
Email: jscarr@rlssa.org.au

REPRESENTATIVES

UNICEF

Mr Plong Chhaya
Child Protection Officer
UNICEF Cambodia
No. 11, 75th Street
Srachark Quartier
Phnom Penh
Cambodia
Telephone: +855 23 426 214/5 (Extension148)
Fax: +855 23 426 284
Mobile: +855 12 948 506
Email: cplong@unicef.org

Ms Nguyen Thi Thanh An
Child Injury Prevention Specialist
Child Survival and Development
UNICEF Viet Nam
81A Tran Quoc Toan Street
Ha Noi
Viet Nam
Telephone: +84 4 3942 5706 (Extension 270)
Fax: +84 4 942 5705
Mobile: +84 912 252 011
Email: nttan@unicef.org

Ms Marisa Ricardo
Health Specialist
UNICEF Manila
31/F Yuchengco Tower
RCBC Plaza
Ayala Avenue corner Gil Puyat Avenue
Makati City
Philippines
Telephone: (63 2) 901 0145
Fax: (63 2) 810 1453
Mobile: +63 917 858 9454, +63 837 6793
Email: mricardo@unicef.org

Dr Shumona Shafinaz
UNICEF Bangladesh
BSL Office Complex, 5th floor
(Dhaka Sheraton Hotel Annex)
1, Minto Road, Ramna
Dhaka
Bangladesh
Telephone: +880 2 933 6701-10 (Extension 466)
Fax: +880 2 933 5641-2
Email: msshafinaz@unicef.org

Mr Xu Zhu
EPI Specialist
Health and Nutrition Section
UNICEF China
12, Sanlitun
Beijing 100600
China
Telephone: +86 10 6532 3131 38
Fax: +86 10 6532 3107
Mobile: +86 13521 082687
Email: xzhu@unicef.org

OBSERVERS

The Alliance for Safe Children

Dr Michael Linnan
Technical Director
The Alliance for Safe Children
2C, 39/9 Soi Langsuan, Ploenchit
Patumwan
Bangkok 10330
Thailand
Telephone: (66-2) 652-0278
Email: mlinnan@tasc-gcipf.org

Department of Health,
Philippines

Dr Manuel Calonge
Child Health Program Officer
National Center for Disease Prevention and Control
Department of Health
Rizal Avenue, Santa Cruz
Manila 1003
Philippines
Telephone: (63 2) 732 9956
Fax: (63 2) 711 7846
Email: mfcalonge@yahoo.com

Ms Lita Orbillo
National Center for Disease Prevention and Control
Department of Health
Rizal Avenue, Santa Cruz
Manila 1003
Philippines
Telephone: (63 2) 732 9956
Fax: (63 2) 743 8301
Email: litaorbillo@yahoo.com

Ms Theresa D. Timbang
Supervising Health Program Officer
National Epidemiology Center
Department of Health
Rizal Avenue, Santa Cruz
Manila 1003
Philippines
Telephone: (63 2) 743 8301 Local 1904
Fax: (63 2) 743 8301
Email: tdtimbang@yahoo.com

Ministry of Public Health,
Thailand

Miss Som Ekchaloemkiet
Public Health Technical Officer
Bureau of Non-Communicable Diseases
Department of Disease Control
Ministry of Public Health
Tivanond Road
Nonthaburi 1100
Thailand
Telephone: (66 2) 590 3967
Fax: (66 2) 590 3968
Email: som_atat@yahoo.com

Philippine Life Saving Society,
Inc.

Mr Jose Arne A. Navarra
President
Philippine Life Saving Society, Inc.
202-B Philsports Complex
Meralco Avenue
Pasig City 1605
Philippines
Telephone: (63 2) 687 7403
Fax: (63 2) 687 3115
Email: philippinelifesaving@gmail.com

Safe Kids Worldwide
Philippines

Dr Rafael J. Consunji
President
Safe Kids Worldwide
3/F Cargohaus Building
Barangay Vitales, NAIA Complex
Parañaque City 1700
Philippines
Telephone: (63 2) 879-4583
Fax: (63 2) 879-4538
Email: rafaelconsunji@yahoo.com
safekids_philippines@yahoo.com

Ms Ma. Theresa A. Perez
Executive Director
Safe Kids Worldwide
3/F Cargohaus Building
Barangay Vitales, NAIA Complex
Parañaque City 1700
Philippines
Telephone: (63 2) 879-4583
Fax: (63 2) 879-4538

Singapore Sports Council

Mrs Cory Gambardella
Deputy Director for Safe Swimming
Singapore Sports Council
230 Stadium Boulevard
Singapore 397799
Email: corygambardella@me.com

University of the Philippines

Professor Jonathan P. Guevarra
Department of Health Promotion and Education
College of Public Health
University of the Philippines
625 Pedro Gil Street
Ermita
Manila
Philippines
Telephone: (63 2) 5260811
Fax: (63 2) 5260811
Email: jonguevarrarn@yahoo.com
jpguevarra@gmail.com

5. SECRETARIAT

Dr Hisashi Ogawa (Responsible Officer)
Regional Adviser
Environmental Health
World Health Organization
Regional Office for the Western Pacific
United Nations Avenue
P.O. Box 2932
1000 Manila
Philippines
Telephone: (63 2) 528-8001
Fax: (63 2) 521-1036
Email: ogawahi@wpro.who.int

Dr Chamaiparn Santikarn
Regional Adviser
Disabilities, Injury Prevention and Rehabilitation
World Health Organization
South-East Asia Regional Office
Indraprastha Estate
Mahatma Gandhi Marg
New Delhi-110002
Telephone: 23370804 Ext. 26519
Fax: (91)-11-23379507, 23370197 & 23379395
E-mail: santikarnc@searo.who.int

Dr David Richard Meddings
Medical Officer
Department of Violence and Injury Prevention and Disability
World Health Organization
Headquarters Office in Geneva
CH-1211 Geneva 27
Switzerland
Tel. No.: +4122 791 3798
Fax No.: +4122 791 3111
Email: meddingsd@who.int

Dr Krishnan Rajam
Technical Officer
Violence and Injury Prevention and Disability
Noncommunicable Diseases and Mental Health
World Health Organization
Regional Office for the Western Pacific
United Nations Avenue
P.O. Box 2932
1000 Manila
Philippines
Telephone: (63 2) 528-8001
Fax: (63 2) 521-1036
Email: rajamk@wpro.who.int

Dr Patanjali Dev Nayar
Technical Officer
Maternal and Child Health and Nutrition
World Health Organization
Regional Office for the Western Pacific
United Nations Avenue
P.O. Box 2932
1000 Manila
Philippines
Telephone: (63 2) 528-8001
Fax: (63 2) 521-1036
Email: nayarp@wpro.who.int

Mr Jonathon Passmore
Technical Officer
Road Safety and Injury Prevention
Office of the WHO Representative in Viet Nam
63 Tran Hung Dao Street
Hoan Kiem District
Ha Noi
Socialist Republic of Viet Nam
Telephone: (844) 3-943-3734
Fax: (844) 3-94303740
Email: passmorej@wpro.who.int

Dr John Juliard Go
National Professional Officer
Office of the WHO Representative in the Philippines
National Tuberculosis Centre Building
Second Floor, Building 9
Department of Health
San Lazaro Hospital Compound
Sta. Cruz
Manila
Philippines
Telephone: (63 2) 528 9063
Fax: (63 2) 3388605
Email: goj@wpro.who.int

PROGRAMME OF ACTIVITIES

23 March 2010

- 07:30-08:30 Registration
- 08:30-09:00 Opening ceremony
 Opening address by the WHO Regional Director for the Western Pacific
 Self-introduction of participants, resource persons, representatives, observers
 and members of Secretariat
 Selection of workshop officers (e.g. Chairperson, Vice-Chairperson, Rapporteur)
- 09:00-09:30 Coffee/tea break and group photograph
- 09:30-09:50 Introduction to the workshop (e.g. objectives, programme of activities)
 Dr H. Ogawa, Regional Adviser, Environmental Health, WHO
- Objective 1: To acquire new knowledge in the development of data collection systems, and
 monitoring and utilization of data on childhood drowning; and implementation and
 monitoring of evidence-based interventions to prevent childhood drowning
- 09:50-10:20 Global overview on drowning
 Dr D.R. Meddings, Medical Officer, Violence and Injury Prevention and Disability, WHO
- 10:20-10:50 Building partnerships for drowning prevention
 Mr J. Scarr, Chief Operating Officer, The Royal Life Saving Society Australia
- 10:50-11:20 Lessons learnt in drowning prevention in Asia
 Dr A. Rahman, Technical Director, Centre for Injury Prevention and Research
- 11:20-11:40 Discussion
- 11:40-13:00 Lunch break
- 13:00-15:00 Country presentations
- 15:00-15:30 Coffee/tea break
- 15:30-16:00 Country presentations (continuation)
- 16:00-16:30 UNICEF's experience with drowning prevention in Bangladesh and China
- 16:30 Informal get-together

24 March 2010

- 09:00-09:20 Summary of Day 1 proceedings
Dr K. Rajam, Technical Officer, Violence and Injury Prevention and Disability, WHO
- 09:20-09:50 Issues in data collection
Dr Michael Linnan, Technical Director, The Alliance for Safe Children
- 09:50-10:00 Group work: Introduction to group discussion
- 10:00-10:30 Coffee/tea break
- 10:30-12:00 Group work
- 12:00-13:00 Lunch break
- 13:00-14:00 Group work (continuation)
- 14:00-15:00 Presentation and discussion of group work
- 15:00-15:30 Coffee/tea break
- 15:30-16:00 Designing interventions for drowning prevention
Mr J. Scarr

25 March 2010

- 08:30-08:45 Summary of Day 2 proceedings
Dr C. Santikarn, Regional Adviser, Disabilities, Injury Prevention and Rehabilitation, WHO
- Objective 2: To identify the next steps for developing country-specific action plans for prevention of childhood drowning
- 08:45-09:00 Capacity-building for drowning prevention
Dr D.R. Meddings
- 09:00-10:00 Group work: Developing country-specific interventions for childhood drowning prevention
- 10:00-10:30 Coffee/tea break
- 10:30-12:00 Presentation of country action plans
- 12:00-12:30 Summary
- 12:30-12:45 Closing ceremony

LIST OF DOCUMENTS

WPR/DHP/07/HSE(1)/2010/IB/1	- Information Bulletin
WPR/DHP/07/HSE(1)/2010/IB/2	- Provisional List of Participants, Resource Persons, Representatives, Observers and Secretariat
WPR/DHP/07/HSE(1)/2010.1a	- Provisional Agenda
WPR/DHP/07/HSE(1)/2010.1b	- Tentative Programme of Activities
WPR/DHP/07/HSE(1)/2010/INF./1	- Country Report (Viet Nam)
WPR/DHP/07/HSE(1)/2010/INF./2	- Country Report (Cambodia)
WPR/DHP/07/HSE(1)/2010/INF./3	- Country Report (Philippines)
WPR/DHP/07/HSE(1)/2010/INF./4	- Country Report (Malaysia)
WPR/DHP/07/HSE(1)/2010/INF./5	- Country Report (Singapore)
WPR/DHP/07/HSE(1)/2010/INF./6	- Country Report (Thailand)
WPR/DHP/07/HSE(1)/2010/INF./7	- Country Report (Lao People's Democratic Republic)
WPR/DHP/07/HSE(1)/2010/INF./8	- Country Report (Maldives)
WPR/DHP/07/HSE(1)/2010/INF./9	- Country Report (Indonesia)

OPENING REMARKS BY DR SHIN YOUNG-SOO
WHO REGIONAL DIRECTOR FOR THE WESTERN PACIFIC
AT THE WORKSHOP ON PREVENTION OF CHILDHOOD DROWNING
IN SOUTH-EAST ASIAN COUNTRIES, MANILA, 23-25 MARCH 2010

DISTINGUISHED GUESTS,

LADIES AND GENTLEMEN.

I would like to welcome you warmly to the Workshop on the Prevention of Childhood Drowning in South-East Asian Countries.

About 56 000 children under 15 years of age die from drowning every year in the Western Pacific Region. This makes drowning one of the leading causes of childhood deaths in the Region. For every fatal drowning, there are many more non-fatal cases of drowning, serious enough to require hospitalization. Disability is a tragic consequence of near-fatal drowning among children.

As you are aware, Millennium Development Goal 4 calls for a two thirds reduction in under-5 mortality by 2015. Governments have made great progress in preventing communicable diseases and improving child nutrition.

Nevertheless, we need to enhance our efforts to prevent injuries---including drowning---in children. Injuries significantly affect child development as well.

The Convention on the Rights of the Child, ratified by almost all governments, states that all children have a right to a safe environment and to protection from injury and violence. Safeguarding these rights is a challenge, but it can be achieved through concerted effort.

The 2008 World Report on Child Injury Prevention called for renewed efforts in child injury prevention by Member States as a means of improving child survival.

Implementing this recommendation, particularly in low- and middle-income countries where the problem of drowning is most pressing, will require enhanced capacity. This need will be addressed in this workshop, with the latest knowledge and the sharing of technical experience and lessons learnt. A central issue is the need to strengthen the quality of data on childhood drowning.

Given the complexity of childhood drowning, prevention requires a holistic approach, based on the circumstances and particular pattern observed in each country.

Strategies such as the building of safe bridges; the installation of a safe water supply; building barriers at pools, ponds and other bodies of water; the covering of wells; and the use of floating devices are effective in reducing drowning among children.

The challenge comes in incorporating these ideas into new and existing housing environments. We need to develop innovative community-based projects that are cost-effective and sustainable.

WHO looks forward to cooperation with Member States and partners such as UNICEF, the International Life Saving Federation, Safe Kids Worldwide, and The Alliance for Safe Children to achieve our common goal of preventing drowning among children.

I urge you to participate actively in the discussions and look forward to the outcomes of the workshop. I hope that you will have a fruitful and enjoyable stay in Manila.

Thank you.