# Global Health Workgroup DRAFT Starter List of Research Priorities

#### **Purpose of the Starter List**

The Starter List is for discussion purposes at this stage of the CDC Research Agenda Development Process. It is a DRAFT listing of broad research concepts that are not yet integrated into a specific research agenda for CDC. Suggestions and modifications to the Starter List will be used to develop a draft CDC-wide Research Agenda that addresses critical research needs and health protection goals.

There are seven focus areas on the Starter List, one corresponding to each of the six Research Agenda Development Workgroups, plus a seventh for cross-cutting research that serves as a foundation for many types of public health research and programs.

You will find the Starter List for Global Health research ideas on the following pages of this document. The Starter List for other focus areas is also available on the OPHR Website (see URL below).

#### Your opportunities for input

You will have two opportunities for input to the CDC-Wide Research Agenda development process:

### 1) Commenting on the Starter List

We welcome your input on both the Starter List and the CDC-wide Research Agenda development process. We will be accepting public comments on the Starter List and process through April 15, 2005. You can provide suggestions and comments by visiting the following URL:

http://www.rsvpbook.com/custom\_pages/792\_CDC\_comments.php

## 2) Commenting on the Public Comment Draft

Later this summer, you will have another opportunity to provide input by offering comments on the Public Comment Draft of the CDC-wide Research Agenda. The Public Comment Draft will be published in the *Federal Register* and on the CDC Office of Public Health Research (OPHR) Website below. The target date for release of the public comment draft is mid-June 2005.

The OPRH website will also provide periodic updates on the Research Agenda development process. Please visit our Website at:

http://www.cdc.gov/od/ophr/cdcra.htm

# Global Health Workgroup DRAFT Starter List of Research Priorities

Theme ID#	Research Theme Title and Description	<b>Examples of Research Activities</b>
G1	Social Capital and Health Outcomes Evaluate the pathways linking socioeconomic status and health outcomes.	<ul> <li>Examine how education influences health outcomes and behaviors at different stages of life;</li> <li>Define the role of "human resources" in delivering health;</li> <li>Measure and quantify the nature and magnitude of social resources that are available to populations in different societies; and</li> <li>Examine the relationship between trust, reciprocity, civic/community involvement, and health outcome and behavior.</li> </ul>
G 2	Standardization of Global Health Data Develop, implement, and evaluate procedures, definitions, and health measures that are comparable across countries.	<ul> <li>Improve comparability of health data (e.g., disease, injury, death, or disability) across countries;</li> <li>Determine appropriate outcome measures for cross-country comparisons;</li> <li>Develop and evaluate standardized survey instruments and methods for collecting data across countries; and</li> <li>Improve understanding of comparability issues.</li> </ul>
G 3	Occupational Health in International Settings Assess workplace safety in developing countries with high rates of diseases, injuries, and other negative work-related health problems and evaluate interventions that can be adapted and used in other settings.	<ul> <li>Measure workplace safety in the physical and social environment;</li> <li>Evaluate and adapt successful interventions from developed countries;</li> <li>Develop toolboxes for businesses and employees; and</li> <li>Improve surveillance in developing countries.</li> </ul>

Theme ID#	<b>Research Theme Title and Description</b>	<b>Examples of Research Activities</b>
G 4	Prevention and Control of Injuries in the Developing World  Assess the causes, consequences, and costs of injuries due to violence, drowning <sup>1</sup> , road traffic injuries, and other injuries (intentional and unintentional), and the efficacy, effectiveness, and economic efficiency of interventions to prevent injuries and mitigate consequences.	<ul> <li>Determine the relationship between violence and various aspects of globalization, including economic, environmental, and cultural impacts;</li> <li>Identify risk and protective factors common to different cultures and settings; and</li> <li>Develop promising primary and secondary prevention approaches applicable in a variety of contexts.</li> </ul>
G 5	Complex Humanitarian Emergencies Assess the key risk factors and prevention measures to decrease illness and death in international Complex Humanitarian Emergencies (CHE).	<ul> <li>Develop and evaluate procedures for the rapid measurement of violent injuries during CHE;</li> <li>Develop standard research definitions for illness and death resulting from armed conflict;</li> <li>Assess the impact and extent of sexual violence and sexual exploitation during armed conflict;</li> <li>Address safe water and sanitation support; and</li> <li>Develop methods to quantify the problem of vitamin deficiencies in CHE and identify ways to treat and prevent such deficiencies.</li> </ul>
G 6	Public Health Preparedness in International Settings Evaluate the effectiveness of capacity building interventions to increase public health preparedness in other countries.	• Measure public health preparedness according to a standardized all-hazard approach that will take into consideration: (1) natural hazards (e.g., earthquakes, tsunamis, volcanic eruptions, influenza pandemics, and SARS outbreaks); (2) technological hazards (e.g., structural failures, transportation crashes, urban fires, and hazardous material releases); and (3) conflict/terrorism related disasters.

<sup>&</sup>lt;sup>1</sup>Research on drowning would include assessing the risk and protective factors related to childhood drowning and the contribution of education, water safety training and skill development, environmental barriers, and supervision in reducing childhood drowning.

Theme ID#	<b>Research Theme Title and Description</b>	Examples of Research Activities
G 7	Health Marketing in International Settings Improve strategies for distributing products and changing behavior to prevent disease in the developing world.	<ul> <li>Develop social marketing through existing commercial channels;</li> <li>Bundle products and behavior change communications around clinical services or HIV testing and counseling; and</li> <li>Deliver products and behavior change communications through community-based institutions and professions or through newly formed community-based social entrepreneurs.</li> </ul>
G 8	Micronutrient Malnutrition Develop, implement, and evaluate interventions, including fortification of foods, to prevent vitamin deficiencies of global importance, such as iodine, iron, zinc and vitamin A.	<ul> <li>Investigate the effectiveness of various forms of vitamin and mineral distribution systems in populations, including supplementation, fortification, multivitamin sprinkles, and foodlets; and</li> <li>Improve vitamin and mineral assessment methods, particularly for iron, zinc, and vitamin A deficiencies.</li> </ul>
G 9	Evaluation of Intervention Cost- Effectiveness Assess the impact of different interventions directed at priority global health problems in developing countries.	<ul> <li>Assess the cost-effectiveness of health interventions in the developing world in all areas of public health including: infectious diseases, non-communicable diseases, nutrition, injuries, environmental health, and maternal-child health.</li> </ul>
G 10	Public Health Consequences of Exploitation of Women and Children Assess the health problems and needed services of women and children who are victims of exploitation and examine the causes of exploitation and interventions needed to prevent it. Research would focus on the sexually exploited and child laborers.	<ul> <li>Develop surveillance methods to improve the gathering of data on the health problems of exploited women and children; and</li> <li>Create and develop interventions to prevent exploitation, including child labor, sexual exploitation, and trafficking.</li> </ul>

Theme ID#	Research Theme Title and Description	Examples of Research Activities
G 11	Global Disease Prevention with Immunization  Evaluate vaccination strategies to improve disease control and increase coverage in international settings.  Other Endemic and Emerging Global Infectious Diseases of Global Significance Develop and evaluate tools to detect, diagnose, predict, and eliminate diseases of global or regional importance.	<ul> <li>Identify new technologies for Vaccine Preventable Disease (VPD) surveillance;</li> <li>Refine estimates of the current and projected global burden of illness and death from VPDs;</li> <li>Measure the field efficacy of current and new vaccines;</li> <li>Measure the effectiveness and economics of different strategies to increase immunization coverage;</li> <li>Evaluate the integration of immunization with other health interventions;</li> <li>Develop field appropriate methods for detection and laboratory confirmation of VPDs; and</li> <li>Evaluate the illness, death, and economic impact of diseases for which new vaccines are in development.</li> <li>Develop new tools (e.g., drugs, diagnostics, and vaccines), treatment regimens, and strategies to improve existing tools to detect, diagnose, predict, and eliminate diseases.</li> </ul>
G 13	Global HIV/AIDS, Tuberculosis (TB), and Sexually Transmitted Diseases (STDs) Develop, implement, and evaluate new approaches toward prevention, treatment, diagnostic testing, surveillance, and delivery of services for HIV/AIDS, TB, and STDs.	<ul> <li>Develop medical interventions to prevent and treat HIV infection among adults and children;</li> <li>Incorporate reproductive services into HIV prevention strategies;</li> <li>Develop behavioral interventions to promote knowledge of HIV status, treatment adherence, and simpler, less costly diagnosis techniques;</li> <li>Develop and evaluate interventions to prevent or reduce STDs; and</li> <li>Develop and evaluate new and faster diagnostic testing for multi-drug resistant TB as well as program-related interventions.</li> </ul>

Theme ID#	Research Theme Title and Description	Examples of Research Activities
G 14	Non-Communicable Diseases in the Developing World Define major risk factors for chronic diseases representing a high burden of disease in the developing world and develop interventions for their prevention and control.	<ul> <li>Assess the social, cultural, and economic influences on health behaviors leading to chronic diseases;</li> <li>Explore why certain groups and communities engage in unhealthy behaviors and examine individual and contextual factors that shape individual health behaviors;</li> <li>Evaluate methodologies for surveillance of major risk factors; and</li> <li>Assess interventions that reduce the prevalence of key risk factors.</li> </ul>
G 15	Orphans and Other Vulnerable Children Develop and evaluate interventions to reduce adverse mental health and psychosocial problems of orphans and other children affected by HIV.	<ul> <li>Assess interventions to improve family and community capacity to care for orphans by reducing shame and strengthening support systems; and</li> <li>Study the incidence and prevalence of children with developmental delays and psychosocial conditions.</li> </ul>
G 16	Safe Water Determine the burden of illness associated with small and unregulated water supplies.	<ul> <li>Assess the illness and death associated with unsafe water supplies; and</li> <li>Develop, implement, and evaluate interventions to improve access to safe water supplies.</li> </ul>
G 17	Millennium Development Goals—Maternal & Under-5 Mortality Develop, implement, and evaluate interventions that increase maternal and child survival in priority countries to meet the Millennium Development Goals.	<ul> <li>Evaluate strategies to ensure skilled assistance at birth deliveries;</li> <li>Develop community-based interventions to ensure appropriate care of the sick newborn; and</li> <li>Assess strategies designed to prevent major causes of infant mortality such as malaria, diarrheal diseases and pneumonia.</li> </ul>