

MEETING SUMMARY

Global Work Group, Advisory Committee to the Director

Centers for Disease Control and Prevention

Teleconference Meeting on April 23, 2014

Meeting #8

David Fleming, Chair, ACD Global Work Group

Tom Kenyon, Director, Center for Global Health and
GWG Designated Federal Officer

On April 23, 2014, the Global Work Group (GWG) of the Centers for Disease Control and Prevention (CDC) Advisory Committee to the Director (ACD) convened a teleconference from 9:00 am until 11:00 am EDT. The meeting included updates from the Center for Global Health (CGH); challenges and opportunities facing CDC's global noncommunicable disease (NCD) portfolio; and global health security issues associated with antimicrobial resistance (AMR).

I. Welcome and Introductions

Dr. Tom Kenyon, CGH Director welcomed and thanked all the participants joining the meeting via teleconference. Attendees in person and on the phone are listed in Attachment A.

II. Center for Global Health Update

Global Health Fiscal Year (FY) 2015 President's Budget

Overall, the budget for global health in FY 2015 is promising, despite a reduction in overall funding and in global tuberculosis. The US Department of Health and Human Services is supporting a new FY2015 \$45 million initiative for CDC to move forward in Global Health Security (GHS). The polio line increased by \$10 million, and the President's Emergency Plan for AIDS Relief (PEPFAR) remained stable. Unfortunately, funds for National Public Health Institutes (NPHI) do not appear in the FY 2015 budget.

CDC Priority Initiatives for FY 2015

Global health features prominently in CDC Director Dr. Tom Frieden's priorities for FY 2015. The CDC priorities include GHS, AMR, prescription drug overdose, advanced molecular detection (AMD), and the Million Hearts® Initiative.

Global Health Security Agenda/Update

The GHS agenda was launched on February 13, 2014, and it is a global call to action with the International Health Regulations as the centerpiece. A follow-up meeting will be convened in Finland in May 2014, during which each country will define its own GHS commitments. A high-level event will be hosted by the White House in September 2014. The FY 2014 goal is to complete the demonstration projects in Uganda and Vietnam and to gear up for implementation in FY 2015. The FY 2015 funds will help CDC build on its existing work and scale up additional countries which will be selected based on risk, existing relationships, and national commitments.

National Public Health Institutes

CDC's budget for NPHIs is \$7.5 million in FY 2014. By September 2015, CDC will have identified at least five countries in which direct implementation of a CDC-like institution will be supported. CDC will help another three countries with their planning process. Dr. Kenyon attended an April 2014 meeting of African Ministers of Health, an one of their commitments was to pursue the establishment of an African-wide CDC equivalent. A task force will be organized by the African Union to determine the institution's function, format, and financial implications.

Polio Elimination

Polio continues to be a challenging problem and is an example of how insecurity contributes to disease transmission. Nigeria and Pakistan continue to be "hot spots," but no polio cases have been detected in Nigeria since February 1, 2014. There is encouraging progress in the South East Asia Region which received its Polio-Free Certification in March 2014. Somalia, Kenya, and Ethiopia have not reported a case in some time. Syria continues to experience security and stability issues, with its last case in late January 2014. Iraq's last case was in February 2014.

Central Africa, particularly Cameroon and Equatorial Guinea, is an area of concern. The World Health Organization (WHO) has released travel recommendations as a result.

Ebola Hemorrhagic Fever Outbreak, West Africa, 2014

The National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) has a team helping advance laboratory work, epidemiologic and contact investigations, community education, and provided a ready-made Epi-Info tool designed for hemorrhagic fevers. This outbreak has been disruptive to travel and trade in the region.

First Chikungunya Cases in Western Hemisphere

NCEZID has been engaged in Chikungunya virus work with important regional partners for some time and predicted that it would emerge in the Western Hemisphere. At least six deaths and over 2500 cases have been attributed to Chikungunya Fever in the Caribbean region.

MERS-CoV

Concern is growing regarding the recent escalation of Middle Eastern Respiratory Syndrome Coronavirus (MERS-CoV). Cases with a confirmed travel history to Saudi Arabia have been reported from Greece, Jordan, Malaysia, and The Philippines. A large healthcare-associated cluster has been reported in the United Arab Emirates (UAE), and an unusually large number of cases have been reported in Saudi Arabia since March 2014. CDC has deployed a team from the National Center for Immunization and Respiratory Diseases (NCIRD) to the UAE.

Update: Division of Parasitic Diseases and Malaria (DPDM)

Intense efforts are ongoing to eliminate lymphatic filariasis from Haiti. The division is also applying an innovative approach to eliminate or control malaria in Western Kenya. The approach includes assessing the feasibility of detecting asymptomatic parasitemia and providing mass screening and treatment. Bed net durability and efficacy studies are ongoing.

Update: Division of Global HIV/AIDS (DGHA)

CDC is a major partner in global HIV/AIDS treatment and prevention, with significant investments in antiretroviral drug treatment for men, women (including pregnant women), and children, as well as in voluntary medical male circumcisions. Kenya is a strong example of using epidemiology to guide HIV response with the Kenya AIDS Indicator Survey (KAIS). A new funding opportunity announcement (FOA) in this area will lead to more robust estimates of prevalence, incidence, and other parameters that can guide an evidence-based HIV response. These approaches are important as resources are more constrained, but the demand grows. Dr. Deborah Birx, former Director of DGHA, was sworn in as Ambassador-at-Large and US Global AIDS Coordinator in April 2014. Recruitment for the next DGHA Director is underway.

CDC/World Bank (WB) Collaboration

CDC and WB met in March, 2014, to identify areas for collaboration and synergistic work, lending CDC's expertise to the design and monitoring of WB loans. Four areas were identified for collaboration between CDC, WB, and other partners within HHS as well as the Office of Global Affairs and USAID: GHS, NCDs, capacity-building, and focus countries of Haiti and Burma.

Upcoming High-Level Meetings

The World Health Assembly (WHA) meeting will be May 19 – 24, 2014, and the annual PEPFAR meeting will be June 1 – 4, 2014.

GWG Discussion

The idea of a CDC equivalent in Africa is ambitious. There was discussion on the feasibility of one entity serving a continent as large and complex as Africa. Some potential benefits of a continental agency are to: improve information-sharing, create a laboratory network to transport specimens for rapid analysis and feedback, and provide a stronger information technology (IT) platform. The priority in Africa is building national capacity for each country to respond to its own needs. A continental agency could be helpful when a nation is overwhelmed by an issue, or when outbreaks cross borders and escalate. African countries must “own” and design this entity from the beginning. The African Union task force will undergo a mapping exercise to catalog the many existing institutions and to identify regional expertise.

Regarding the CDC and WB collaboration, WB leaders have strong backgrounds in global health and are very metric-oriented. WB expects countries to provide evidence that the WB investments are achieving outcomes. This assessment-focused approach fits well with CDC.

GWG expressed disappointment at the lack of funding for NPHIs and expressed hope that the efforts could continue, even with a lack of financing. The \$7.5 million budget in FY 2014 is for two years. Regarding the GHS proposal in FY 2015, Congressional staffers and leaders are considering supporting NPHIs. The goals of GHS and NPHIs may overlap.

There was discussion regarding applying GHS strategies and initiatives to address polio quickly in “red list” priority countries. There is little overlap with the initial 12 countries targeted for 2014, but the Global Immunization Division (GID) is working with the Division of Global Health Protection (DGHP) to ensure that the “red list” countries are included and that emergency preparedness plans for polio protection are in place.

The metrics for GHS bolster the countries that participate, and include identifying three core syndromes to address. One of the GHS goals for prevention is to ensure that each country achieves 90% measles vaccine coverage. This metric will require a system for vaccination that can also build capacity for response to other conditions.

III. CDC’s Global NCD Portfolio: Opportunities and Challenges

Dr. Sonia Angell, Senior Advisor, DGHP, CGH provided a summary of the NCD global burden and how CDC is organized to address NCDs. She reported that NCDs are the leading cause of death worldwide and include cardiovascular disease (CVD), cancer, chronic respiratory disease, diabetes, and injuries. Global NCD work at CDC focuses on thinking strategically about organizing current work to make a difference. There is a need to develop a meaningful global response within the context of extremely limited resources. CDC’s domestic expertise in surveillance, prevention and control has global relevance.

The level of global NCD activities varies by center at CDC. When CGH was created in 2010, it included a position in the Office of the Director to work across centers, bringing NCD resources and activities together to develop a “One CDC” approach to the issues. A NCD unit was created within DGHP during the recent reorganization of CGH in response to an evolving demand for NCD work and coordination across CDC.

Initial CDC funding for NCDs came as part of the Field Epidemiology Training Program (FETP), CDC’s flagship program for providing country workforce development and capacity-building in epidemiology. Over the past two years, 24 modules and 13 special training programs in NCD

topic areas were created for FETP. NCD work is being conducted in focus countries (Brazil, China, Columbia, Jordan, Kenya, Tanzania, and Thailand) so that limited resources are used efficiently. Ongoing and meaningful work in NCDs continues in other countries as well.

Following a high-level United Nations (UN) meeting focused on NCDs in 2011, CDC developed a strategic framework for global NCD activities with strategic goals. In 2013, CDC prioritized its work around four topic areas: road traffic injuries, hypertension, tobacco, and surveillance. Building on the training modules for FETP, mini-grants are being used to stimulate activities and research in countries related to road traffic injuries and tobacco. Tobacco work continues with support from the Bloomberg Foundation. Programs are also addressing hypertension, such as a program in China focusing on reducing salt intake. CGH is working on a global, standardized hypertension treatment initiative that learns from TB and HIV control programs. NCD programs can also build on existing systems, such as the PEPFAR infrastructure and the Violence Against Children surveys.

Dr. Ursula Bauer, Director, National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), CDC, indicated that her center's global portfolio builds on its domestic agenda and shares strategies to address chronic diseases and promote health with other countries. The center also supports the five elements of CDC's Global Health Strategy with low- and middle-income countries and included examples of their work:

1. Work with Ministries of Health (MOHs) to plan, manage, and evaluate public health programs: with Bloomberg, NCCDPHP provides leadership and TA to the countries that have implemented the Youth Tobacco Surveys and the Adult Tobacco Surveys. That surveillance work is critical for monitoring the impact of tobacco control interventions.
2. Achieve US and international goals to improve health, including disease eradication and elimination targets: NCCDPHP works to eliminate macronutrient malnutrition, primarily iron, Vitamin A, iodine, and folate, in vulnerable populations around the world. These strategies include mass food fortification and home fortification.
3. Expand global health programs that focus on the leading causes of death and disability: As countries have learned about the Million Hearts[®] Initiative, there has been interest in creating similar activities.
4. Generate and apply new knowledge to achieve health goals: NCCDPHP participates in work to increase cervical cancer screening and follow-up in Bolivia. This work is an example of a collaboration that came about as the result of personal connections and networks and is supported with in-kind resources.
5. Strengthen health systems and their impact: NCCDPHP has worked to increase functional emergency obstetrical care facilities and skilled providers in Haiti, Kenya, and Tanzania.

NCCDPHP engages in global NCD activities in collaboration with the NCD unit in CGH. The center supported the development of the NCD curriculum track within FETP and also provides leadership and subject matter expertise with resources from CGH in the hypertension-related work in China.

GWG Discussion

GWG congratulated CGH on its progress in NCDs, but noted that the portfolio focuses on disease issues rather than on broader issues. Hypertension and road traffic accidents are important problems that may be good targets for specific interventions, but many problems such as obesity and diabetes and their role in cardiovascular disease revolve around changes in lifestyle, which require a broad, strategic community approach. GWG challenged CGH to create

a model that is adaptable in different situations that will incorporate community leadership to address issues that relate to all of the chronic diseases. NCCDPHP's domestic portfolio has moved away from a disease and risk factor focus, even though their budget is still organized along disease and risk factor lines. Million Hearts[®] incorporates that approach as well, including a strong community component with sodium reduction and tobacco control combined with clinical components. The CDC global portfolio is missing this systems-wide approach, so that they can pull the global work together with resources to work in multiple areas.

Changes in health systems have come about in the area of HIV/AIDS control as local groups have bought into the strategies. It may be possible to build on the changes in these health systems to address NCD issues in developing countries, especially in regard to health communications without losing the focus on NCD work. The current work building on the PEPFAR structure for hypertension services could be replicated for other chronic illnesses. Many of these issues are a question of resources. It may not be expensive to add hypertension treatment to an existing infrastructure, but it could be expensive to add all chronic diseases. As hypertension screening improves, more people are in treatment. More people in treatment mean more access to medications and services, and improved health outcomes.

The NCD epidemic is spreading quickly, particularly in countries that can least afford it. CDC must be aggressive and strategic to institute structural changes in places where extra capacity is needed. They have an important opportunity to implement strategies in low- and middle-income countries and to change the trajectories of the epidemic. For instance, the United States Food and Drug Administration (FDA) has proposed to declare that trans-fatty acids are not safe and are a food additive, which could lead to refinements in the processed food supply. Lower-income countries that may not have fully transferred to a processed food supply have the opportunity to introduce policies such as this one, thus changing the context of their processed food supply and reducing diseases related to diet and nutrition. Strategies such as this one are not expensive, but they require political will and the creation of helpful tools/interventions for countries to utilize and get ahead of the epidemic. South Africa just introduced the world's first limitations on sodium in specific categories in the processed food supply. Evaluating the impact of this policy will be important, and mechanisms are needed to create, respond and evaluate quickly when these types of interventions are implemented.

The new US Department of State Office of Global Health Diplomacy (S/GHD) has organized a briefing of outgoing US ambassadors and diplomats on health. Each ambassador is provided with their country's global burden of disease along with discussion of all US government activities in the health sector. Without exception, the diplomats have indicated that they were unaware of these activities and their importance. Simply providing information about disease burden, especially NCDs, has been a great contribution of the new office.

IV. Antimicrobial Resistance: Global Health and Health Security Issues

Dr. Steve Solomon, Director, Office of Antimicrobial Resistance, NCEZID, presented a detailed overview including how CDC will address bacterial AMR globally, work within the GHS framework, and strengthen partnerships, especially with WHO and the Transatlantic Taskforce on Antimicrobial Resistance (TATFAR). He discussed AMR using examples of methicillin-resistant *Staphylococcus aureus* (MRSA) and carbapenem-resistant enterobacteriaceae (CRE) and New Delhi Metallo-beta-lactamase-1 (NDM-1) are spreading with greater speed than in the previous decade. Major risk factors for the increased spread of global AMR include population mobility, increase in trade and travel, vulnerable populations, unnecessary and inappropriate use of antibiotics in humans and industrial agriculture, and environmental changes.

The GHS Initiative includes a significant target for addressing AMR in improving capacities of laboratories to detect high-priority pathogens. Challenges to addressing global AMR include the diversity of technical capacity among countries for laboratory diagnosis, variation among countries' medical care, availability of antibiotics, utilization of laboratory services, and lack of structured international surveillance capacity that will allow for alerts to new forms of evolving and transmitted resistance. Improvement in global AMR is needed in four categories: 1) detection, surveillance, and reporting; 2) improving antibiotic use; 3) interventions and evidence-based, adaptable response strategies; and 4) new drug development.

Enhancing in-country laboratory capacity for diagnosis is an important step toward improving global AMR response. The availability of accurate, reliable, reproducible, and timely information is extremely important. The laboratory data must be collected, managed, analyzed, disseminated, and used productively. CDC is a global leader in surveillance and information capacity, but there are tremendous gaps in identifying and using AMR information around the world. There is no comprehensive, structured surveillance system that can provide alerts for emerging issues or even provide information about current status.

Although controversial, antibiotic use must be improved in humans and in animals. In many countries, antibiotics are available without prescriptions and there are issues with their storage and quality. Adaptable interventions and toolkits are needed in order to assess and understand the drivers of antibiotic resistance in different countries and regions. The 10 Global Disease Detection (GDD) sites have ongoing activities in AMR.

The GHS agenda provides a path forward to address the urgent global problem of AMR. The problem of AMR was included in the President's most recent State of the Union Address, and WHA will address a resolution on AMR. The WHO Global Report on Global AMR Surveillance will be released in April 2014. CDC remains committed to providing technical support to the GHS Initiative by leveraging ongoing work at the GDD sites and other sites around the world. The partnership with TATFAR has been extremely productive and will continue with an expanded scope of activities. NCEZID will continue to work on adaptable toolkits and remain engaged with WHO, countries, other partners, and donors.

GWG Discussion

A US framework for addressing global AMR has not been presented. In September 2013, CDC published a report on domestic antibiotic threats. It was successful in part because it included a clearly-defined framework that made the information accessible and provided a means for thinking about how to address the problem, and such a framework had not been presented before. The GHS agenda has the potential to provide an international framework for considering this complex and difficult problem.

There was discussion regarding antibiotic use and availability. In low-resource countries, people's lives are saved by being able to buy antibiotics over the counter. The implementation of antibiotic laws in some countries might affect outcomes. These issues were discussed at a recent WHO consultation meeting. There are certain critical classes of antibiotics that countries can legitimately restrict. There may be a way to address the antibiotics that are "bad actors" in driving resistance without imposing a solution using the developed world's mechanisms.

There was agreement from many countries at the WHO consultation that every country should measure use and submit information about use to WHO, and that metrics should be developed

for objectives, such as goals related to limiting the use of problematic classes of antibiotics. CDC can play an important role in developing and evaluating the metrics. These issues are included in the GHS agenda, which indicates that countries should focus on three out of seven priority pathogens. The work will not move quickly, but it is doable.

V. Summary

Dr. Fleming thanked CGH for their hard work and expressed appreciation for their openness and spirit. GWG expressed concern regarding moving forward with NPHI work, even with the reality of decreased funding. Regarding NCDs, the process of building capacity and infrastructure at the country level will help move from disease-specific issues to community engagement and metrics. The future directions in AMR are sound, and GWG would appreciate the opportunity to hear more at a future meeting. The next GWG meeting will take place in October 2014, and they hope that it will be in person. He asked CGH to prioritize issues on which GWG input is needed. He suggested that they revisit the CGH Strategic Plan, now that Dr. Kenyon has been in his position for some time.

Dr. Kenyon thanked the members of GWG and the CDC presenters. CGH appreciates GWG as they challenge CDC to continue to achieve impact and build capacity. Input is welcome outside meetings as well.

With that, the teleconference meeting was adjourned at 10:59 AM EDT.

I have reviewed and approved the April 23, 2014 GWG Meeting Summary

6/20/2014
Date



David W. Fleming, MD
Chair, ACD Global Work Group

Attachment A: Meeting AttendeesGWG Members Present

Dr. Willis Akhwale
David Brandling-Bennett, MD
Mickey Chopra, MD, PhD
Walter Dowdle, PhD
David Fleming, MD (ACD Member) (GWG Chair)
Alan Greenberg, MD, MPH (ACD Member)
Ambassador Jimmy Kolker, MPA
Joseph McCormick, MD, MS
Herminia Palacio, MD, MPH (ACD Member)
Andrew Weber, MS

GWG Members Absent

Wade Warren
Zijian Feng

CDC Staff Present

Steve Albert
Sonia Angell
Ron Ballard
Maureen Bartee
Ursula Bauer
Beth Bell
John Blandford
Scott Dowell
Eric Kasowski
Alison Kelly
Thomas Kenyon
Susan Maloney
Rebecca Martin
Jenny Parker
Larry Slutsker
Steve Solomon
Robert Spengler
Jordan Tappero
Marsha Vanderford

General Public

Colonel Linwood Clark
Kendra Cox (CCTI)
Commander Jesse Geibe
Captain Michael Schmoyer

Acronyms Used in This Document

ACRONYM	DEFINITION
ACD	Advisory Committee to the Director
AMD	Advanced Molecular Detection
AMR	Antimicrobial Resistance
CDC	Centers for Disease Control and Prevention
CGH	Center for Global Health
CRE	Carbapenem-Resistant Enterobacteriaceae
DFO	Designated Federal Official
DGHA	Division of Global HIV/AIDS
DGHP	Division of Global Health Protection
DHDSP	Division for Heart Disease and Stroke Prevention
DPDM	Division of Parasitic Diseases and Malaria
DTRA	Defense Threat Reduction Agency
FDA	(United States) Food and Drug Administration
FETP	Field Epidemiology Training Program
FOA	Funding Opportunity Announcement
FY	Fiscal Year
GBD	Global Burden of Disease
GDD	Global Disease Detection
GHS	Global Health Security
GID	Global Immunization Division
GWG	Global Work Group
HHS	(United States Department of) Health and Human Services
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
IHR	International Health Regulations
IMHE	Institute of Health Metrics and Evaluation
IT	Information Technology
KAIS	Kenya AIDS Indicator Survey
MERS-CoV	Middle Eastern Respiratory Syndrome Coronavirus
MOH	Ministry of Health
MOU	Memorandum of Understanding
MRSA	Methicillin-resistant <i>Staphylococcus aureus</i>
NCCDPHP	National Center for Chronic Disease Prevention and Health Promotion
NCD	Noncommunicable Disease
NCEZID	National Center for Emerging and Zoonotic Infectious Diseases
NCIRD	National Center for Immunization and Respiratory Diseases
NDM-1	New Delhi Metallo-beta-lactamase-1
NPHI	National Public Health Institutes
PAHO	Pan-American Health Organization
PEPFAR	President's Emergency Plan for AIDS Relief
S/GHD	US Department of State Office of Global Health Diplomacy
TA	Technical Assistance
TATFAR	Transatlantic Taskforce on Antimicrobial Resistance
TB	Tuberculosis
UAE	United Arab Emirates UAE
UN	United Nations
US	United States (of America)
USAID	United States Agency for International Development
WB	World Bank
WHA	World Health Assembly
WHO	World Health Organization