





Editor's Letter

Dear Readers,

GHD/EMPHNET is pleased to share with you the thirty-fourth edition of its quarterly newsletter. This issue brings you news from GHD/EMPHNET's activities across the region in the past quarter, focusing on projects that support countries in areas of polio eradication and routine immunization; field epidemiology; and prevention and control of infectious diseases

This issue also features a section that highlights the experience of three ambitious young individuals who interned at GHD/EMPHNET during the past three months. This section focuses on the beneficial GHD/EMPHNET internships which expose aspiring individuals to its areas of work and opens the door for creating a pool of potential talents that could be of value to public health in the region and beyond.

The issue's last section provides readers with information on the International Health Regulations (IHR 2005) and their importance of achieving global health security.

We wish you an enjoyable and beneficial reading of this newsletter. As always, we encourage your feedback to help us cater to our audience, in our future issues, in the most valuable and informative way.

The Newsletter Editorial Team.

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GHD/EMPHNET in Iraq: A Growing Collaboration Towards Strengthened Public Health Capacity

During the past ten years, GHD/EMPHNET has worked with the Iraq Ministry of Health (MoH), and relevant governmental entities, and international organizations on various projects that address health priorities of the country. Throughout a strategic and continuous collaboration, GHD/EMPHNET is proud to have supported Iraq in areas of public health workforce development, preparedness and response to health threats in line with the International Health Regulations (IHR 2005), applied epidemiology, routine immunization (RI), health management information systems as well as the prevention and control of infectious diseases.

This collaboration started with supporting the establishment of the Iraq Field Epidemiology Training Program (I-FETP) back in 2010 and with assisting in facilitating training activities for its residents and graduates. Since then, the I-FETP graduated six cohorts who are now members of the national public health workforce and whose competencies in public health surveillance, biostatistics, and epidemiology of priority diseases are needed to strengthen the health system in Iraq. In 2017, the Public Health Empowerment Program (PHEP)- a training program in the basics of field epidemiology and outbreak response- was launched by the MoH and GHD/EMPHNET to enhance the knowledge and skills of national public health professionals in disease surveillance, particularly polio and other vaccine preventable diseases (VPDs). Thus far, three cohorts have graduates from the program.

In the area of knowledge exchange as well, public health professionals from Iraq participated in various regional training workshops supported by GHD/EMPHNET conducted with the aim to contribute to ongoing learning for the public health workforce from the region.

GHD/EMPHNET's collaboration with Iraq has grown to encompass other important health areas for the country. Since 2015, GHD/EMPHNET has been working with the Ministry of Health towards enhancing vaccination coverage throughout Iraq. Collaborating with the Ministry, GHD/EMPHNET implemented training activities in areas of Acute Flaccid Paralysis (AFP)/ Vaccine Preventable Diseases (VPDs) surveillance; RI supportive supervision; and RI microplanning. Furthermore, GHD/EMPHNET also supported Iraq in implementing the Appreciative Inquiry (AI) initiative, an innovative approach aimed at engaging local communities towards achieving full immunization for children. Working closely with the Ministry, as well as national and international partners, GHD/EMPHNET also supported the development of the Expanded Program on Immunization (EPI) Communications Strategy.





To strengthen the country's emergency preparedness and response- in line with IHR 2005- the MoH and GHD/EMPHNET, in coordination with national and international stakeholders, developed a detailed action plan for building the country's capacity in the area of rapid response teams, starting with the highest priority areas. In line with this plan, GHD/EMPHNET supported Rapid Response Teams (RRTs) training workshops at the provincial level.

GHD/EMPHNET and the MoH worked towards achieving stronger control and prevention of infectious diseases. Since 2015, EMPHNET has been working with the Iraq Ministry of Health towards strengthening the surveillance and control of brucellosis in various parts of the country. GHD/EMPHNET is also working with the Iraq Ministry of Health to study the surveillance of hospital-based Meningitis in the country in order to provide policy makers with evidence-based data to be used for controlling the disease whose incidence in Iraq is relatively high compared to that of neighboring countries.

For the Arba'een Pilgrimage, the largest mass gathering worldwide, GHD/EMPHNET supported the Ministry in conducting real-time surveillance, in 2016 and 2018, during the event with the purpose of contributing to early detection, prevention, and control of numerous health threats associated with this large-scale event.

To further facilitate GHD/EMPHNET's growing work in Iraq, the organization established its office in the country in 2018. Through this physical presence, GHD/EMPHNET has been successful in expanding its technical as well as logistic support to public health functions within the country.

GHD/EMPHNET sees this decade-long collaboration as a step towards further success in Iraq, where the organization believes it can support the country towards strengthened public health capacity resulting in improved health outcomes for all communities across the country.









GHD/EMPHNET Supports Workshop on Curriculum Development for FETP-V in Bangladesh

To develop the curriculum for the Field Epidemiology Training Program for Veterinarians (FETP-V) in Bangladesh, the Department of Livestock Services (DLS) and Chittagong Veterinary and Animal Sciences University (CVASU) conducted a working group consultation workshop between April 19 – 20, 2019.

Held in Dhaka, the workshop was supported by GHD/EMPHNET. Its participants represented the DLS; Ministry of Fisheries and Livestock; Food and Agriculture Organization (FAO); the Centers for Disease Control and Prevention (CDC); the Institute of Epidemiology Disease Control and Research (IEDCR); the International Center for Diarrhoeal Disease Research, Bangladesh (icddr,b); Bangladesh Agricultural University; Bangladesh Livestock Research Institute; Chittagong Veterinary and Animal Sciences University; EcoPublic Health Foundation; and Sher-e-Bangla Agricultural University.

To finalize the curriculum and to prepare teaching and learning guidelines before the validation workshop, another session of the working group will be organized. Afterwards, three Interdependent international reviewers will be assigned to review the curriculum developed. This curriculum will then be sent to the Steering Committee meeting for approval. Read more.

EMPHNET Supports Free Medical Day in Ghor Al Safi, Jordan

EMPHNET recently collaborated with King Hussein Cancer Center, Jordan Ministry of Health (MoH), the Jordanian Society for the Care of Diabetes, Al-Balqa Applied University, and the Department of Pharmacy at Petra University in organizing a community outreach activity. This was a free medical day aimed at raising awareness on non-communicable diseases in the underserved rural area of Ghor Al-Safi, Jordan. The activity focused on women's health, diabetes, hypertension, cardiovascular health, and use of antibiotics. This event took place on May 3, 2019. Read more.









EMPHNET Participates in Regional IDRC Workshop on Data-Driven Digital Health Innovations to Strengthen Rights and Health Service

EMPHNET participated in a four-day research agenda and proposal development regional workshop sponsored and facilitated by IDRC - International Development Research Centre between June 16 and 19, 2019. With focus on data-driven digital health innovations to strengthen rights and health services in the MENA Region, the workshop's aim was to discuss an emerging research agenda where health, data and human rights meet with the intention to create space to develop proposals that address pressing questions identified as part of the research agenda.

The workshop's participants represented UN organizations, international and regional NGOs, academia, and the private sector. Read more.

EMPHNET Participates in Fourth National Field Epidemiology Conference of Turkey

The 4th National Field Epidemiology Conference of Turkey was held in Ankara between June 24 and 25, 2019. EMPHNET attended this conference, alongside representatives from TEPHINET, European Centre for Disease Prevention and Control - ECDC, the European Union, CDC Global, as well as international experts.









GHD/EMPHNET Supports Planning Meeting to Perform Internal Review of AFP Surveillance in Morocco

Since 2017, GHD/EMPHNET has been working with the Morocco Ministry of Health (MoH) towards strengthening the surveillance of Acute Flaccid Paralysis (AFP), measles, and other vaccine preventable diseases (VPDs) throughout throughou

Within the framework of this collaboration, both parties met between June 19 and 21, 2019 in Rabat to plan for a internal review of AFP and other VPDs surveillance in Morocco. During this meeting, regional surveillance officers from all the country's regions presented key AFP performance indicators for 2018 as well as the progress in the implementation of the regional plans to improve AFP surveillance. Read more.



GHD/EMPHNET and Afghanistan MoPH Collaborate to Enhance Supportive Supervision of Routine Immunization

The Afghanistan Ministry of Public Health (MoPH) and GHD/EMPHNET are working to address the need for enhanced supportive supervision and monitoring within provincial Expanded Program on Immunization (EPI) teams. As such, GHD/EMPHNET and the Ministry conducted a series of training workshops for over 100 public health professionals from 27 provinces in Afghanistan. The participants were provincial EPI supervisors and trainers. The training workshops started in January of 2019 and concluded in May 2019 and were facilitated by teams from GHD/EMPHNET and the Ministry's EPI. Read more.







GHD/EMPHNET Supports Training on Epi Info for Brucellosis in Iraq

With support from GHD/EMPHNET, the Iraq Ministry of Health (MoH) and the Ministry of Agriculture (MoA), conducted a training session on Epi Info to familiarize participants on its use for the purpose of data entry and analysis pertaining to brucellosis in the country.

This training is part of a collaborative effort made by GHD/EMPHNET, the MoH, and the MoA to strengthen surveillance, diagnosis, and control of brucellosis in Iraq. Within this collaboration, involved parties are working to strengthen laboratory-based surveillance of human and animal brucellosis in the country's high-risk areas. The training took place between April 22 and 24, 2019, at the Baghdad Hotel. Participants were eight members of the surveillance units of the MoH and MoA. Read more.



GHD/EMPHNET Supports Multi-center, Hospital-based Surveillance of Meningococcal Meningitis in Iraq

The Iraq Ministry of Health (MoH) and GHD/EMPHNET are implementing a project titled "The Epidemiology of Invasive Meningococcal Disease: Multi-center, Hospital-based Surveillance of Meningococcal Meningitis in Iraq." The purpose of this project is to increase the capacity of the Iraqi laboratory staff in relation to the Meningococcal surveillance system. The project targets eighteen hospitals in four provinces: twelve located in Baghdad and two in each province: Karkouk, Karbala, and Misan. As part of the project's activities, GHD/EMPHNET in collaboration and coordination with the Iraq MoH conducted follow up visits to the targeted hospitals between April 21 to 24, 2019. Read more.







EMPHNET Supports Veterinarians Training on Fluorescent Polarization Assay (FPA) for Brucellosis in Jordan

As part of the pioneering project titled "Evaluating the Impact of Enhanced Laboratory Based Surveillance of Animal and Human Brucellosis in Jordan," EMPHNET implemented three simultaneous three-day training workshops in East Amman, Mafraq, and Karak between April 29 and May 1, 2019. The Veterinary Directorates of each respective location participated in the capacity-building exercise. The veterinarians were vigorously trained on the new technologies and techniques for detecting Brucella antibodies in serum and milk from infected animals in the field and laboratory. The practical and life-saving test is an amazing diagnostic tool that will bolster field capacities for identifying animals affected by Brucellosis. Read more.

EMPHNET Participates in 25th GOARN Steering Committee Meeting

EMPHNET participated in the 25th Steering Committee Meeting of the Global Outbreak Alert and Response Network (GOARN). The meeting took place in Geneva, Switzerland, between June 20 and 21, 2019. The committee's 21 members discussed issues on moving forward for the network and its partners within a volatile public health reality worldwide.









Meet Our Interns

Believing in the power of knowledge exchange, GHD/EMPHNET welcomes ambitious interns to work with its team towards contributing to the organization's mission. Through the internships it offers, GHD/EMPHNET exposes aspiring individuals to its areas of work, providing them with skills and knowledge in fields relevant to disease control, polio eradication and routine immunization, field epidemiology training programs, health promotion and protection, as well as emergency preparedness and response. GHD/EMPHNET also opens the door for interns to create pool of potential talents and resources that could be of value to public health in the region and beyond.

In the past quarter, we welcomed three young, ambitious individuals who worked with the various teams at the organization, showing a high level of professionalism and a true enthusiasm for public health, especially in this part of the world.

We sat down with them to talk about their internship experience at GHD/EMPHNET. Here is what they had to say.

Kira Barr

I am currently an undergraduate student at Denison University in Ohio, USA. If all goes well, I will be graduating in May of 2020 with a Bachelor of Arts in Global Commerce with a focus in Global Health. After graduation, I plan on attending graduate school and working towards a master's degree in public health. This semester I took the opportunity to study abroad in Jordan to better understand the refugee crisis response in the Middle East through the lens of public health. I am fascinated by the role epidemiology plays in upholding the health of populations, and I hope to continue researching and working in the field in the future.

As an intern at GHD/EMPHNET, I have worked at Center of Excellence for Applied Epidemiology. There, I have done research for the joint project between GHD/EMPHNET and the Iraq Ministry of Health for the real-time surveillance of the Arba'een mass gathering. Most of my time has been spent cleaning and validating data recorded by data collectors at health facilities along the pilgrimage route in 2018. I have also written a report discussing my findings for future use by GHD/EMPHNET and field partners in Iraq. My time at GHD/EMPHNET has reaffirmed my interest in the field of public health and has taught me a considerable amount about the technical skills required for handling big data.







Madelyn Lee

I am an undergraduate student at Vanderbilt University in Nashville, Tennessee, studying Biology and Medicine, Health, and Society. This semester, I studied abroad in Amman with a focus in Public Health and Arabic. In the future, I plan to attend medical school and combine a career in medicine with public health.

As an intern, I worked with the Disease Control Team. The project I worked on was on brucellosis surveillance. I spent most of my time at GHD/EMPHNET researching brucellosis best diagnostic methods and cleaning data surveilling the presence and diagnostics of Brucella in Mafraq. When I return to America, I plan to continue working on this project from abroad by contributing to data analysis and generating a report.

I have learned so much from interacting with so many public health professionals at GHD/EMPHNET. All of the staff here are so kind and never hesitate to explain to me the projects they are working on and their methodology. Similarly, working with real world public health data has allowed me to put the skills I have learned in school into practice. I am so grateful to GHD/EMPHNET for providing me with this learning opportunity!





Rachel Chan

I am an undergraduate student at the University of Washington studying Global Health and Law, Societies and Justice. I plan to do some volunteer work overseas post-graduation and get an MPH in Epidemiology eventually.

At GHD/EMPHNET, I interned for the Polio Eradication and Routine Immunization Team and developed success stories for projects in Afghanistan, Morocco, and Sudan. It was an amazing experience because I was able to apply theory, I had gathered from class, into real-life case studies. This internship allowed me to look at polio in a global context and to explore the role of community mobilization and collaboration among different stakeholders in planning, designing, and implementing initiatives and strategies to eradicate polio. I also gained insight into how GHD/EMPHNET works to target individual health outcomes with the overarching goal of strengthening health infrastructures in resource-limited communities.







The International Health Regulations, IHR/ IHR 2005, are a legally binding agreement whereby 196 countries commit to strengthening global health security. The IHR were devised by the World Health Organization (WHO) "to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade." Compliance with these regulations enables countries to better prevent and control public health events that can transcend national borders.

To guide countries towards the implementation of the IHR, the WHO developed a paper detailing seven areas of work for implementation: each area is explained with a goal, a rationale, expected results, and strategic approaches.

The first area emphasizes international partnerships where countries collaborate in order to implement the IHR in a timely and effective manner. These partnerships are multi-national and multi-sectoral involving UN organizations, international aid agencies, NGOs, academia, professional associations, and others. The second area focuses on generating national action plans geared towards improving countries' capacities in emergency preparedness and response, as well as in the prevention and control of diseases. While these plans are specific to one country, they ultimately protect against the spread of public health risks beyond national The third area of work pertains to strengthening measures at points of entry (PoEs) which are identified within the IHR as airports, ports, and crossings. Assisted and guided by the WHO, countries put into place measures at PoEs with the aim of public health that risks do not become a threat to the international community. To enable the WHO to better support countries in protecting themselves against public health events, the fourth area focuses on enhancing the WHO global alert and response system. A strong WHO alert and response system entails rapid identification and containment of public health risks and emergencies worldwide. While the fifth area aims to improve management of long-standing health risks, such as the influenza, SARS, and polio; the sixth involves sustaining the IHR new legal mechanisms. The latter is brought about through supporting countries in IHR training and assisting them in aligning national laws with the IHR.

The seventh and last area is relevant to monitoring and evaluating of the IHR implementation through four tools. One is mandatory annual reporting, requesting countries to report to the World Health Assembly on their IHR capacities. Another is the Joint External Evaluations (JEEs), which are non-mandatory and involve inter-country and inter-sector efforts in assessing countries' capacities in the prevention, detection, and response to public health events, whether manmade or natural. Another two voluntary tools are simulation exercises and after-action reviews. In simulation exercises, countries become aware of their weaknesses and strengths in relevance to IHR implementation. Considered an essential tool in monitoring IHR implementation, after action reviews, on the other hand, aim to assess response efforts following the conclusion of a public health event to recognize both successes and lessons learned.

Implementation of the IHR across the globe is a long-term process where various stakeholders collaborate and partner with countries towards strengthening national capacities to achieve global health security. (Source: www.who.int)