Support to countries in strengthening capacities under the International Health Regulations

WHO Lyon Office Activity report 2013
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ACRONYMS

AFRO
WHO Regional Office for Africa

AMP
Agence de Médecine Préventive

AMRO/PAHO
WHO Regional Office for the Americas

ARO
Global Alert and Response Operations

CDC
United States Centers for Disease Control and Prevention

EID
Emerging and Reemerging Infectious Diseases

EIS
Event Information Site

EMRO
WHO Regional Office for the Easter Mediterranean

EQA
External Quality Assessment

EU
European Union

EURO
WHO Regional Office for Europe

FAO
Food and Agriculture Organization of the United Nations

FETP
Field Epidemiology Training Programme

FOS
Food Safety and Zoonoses

GCR
Global Capacities, Alert and Response

GOARN
Global Outbreak Alert and Response Network

HSE
Health Security and Environment

IAEA
International Atomic Energy Agency

IATA
International Air Transport Association

ICAO
International Civil Aviation Organization

IDSR
Integrated Disease Surveillance and Response

IHR
International Health Regulations

ILO
International Labour Organization

IMO
International Maritime Organization

ITH
International Travel and Health

NFP
National IHR Focal Point

OIE
World Organisation for Animal Health

PAG
Ports, Airports and Ground Crossings

PAGNET
Public Health and Ports, Airports and Ground Crossings Network

PHEIC
Public Health Emergency of International Concern

PoE
Points of Entry

SEARO
WHO Regional Office for South-East Asia

SSC
Ship Sanitation Certificates

TEPHINET
Training Programmes in Epidemiology and Public Health Intervention Network

UNWTO
United Nations World Tourism Organization

USAID
United States Agency for International Development

WER
Weekly Epidemiological Record

WHO
World Health Organization

WPRO
WHO Regional Office for Western Pacific
In 2013, the Department of Global Capacities, Alert and Response, responsible for coordination of the International Health Regulations around the world, underwent a restructuring to better support WHO in achieving its objective of ensuring global health security. This restructuring was carried out in keeping with the WHO reform agenda and the Department has since been better able to more diligently pursue its mission to help countries better and more rapidly respond to the public health challenges we face today. As such, GCR is strengthening coordination with the WHO Regional Offices and its international network of partners, recognizing that public health security is a global challenge, which cannot be achieved unless all governmental and other actors work in unison.

Improving health security is at the heart of the activity of the WHO Lyon Office, and its direct engagement in the implementation of the International health Regulations is of particular importance. Working in close collaboration with the WHO Regional and country offices, the technical activities of the Office aim to strengthen surveillance and response capacities so that countries may better detect, evaluate and notify events in order to contain their spread at the source and therefore stop these events from becoming public health events of international concern.

The close of 2013 was marked by the signature of the new Framework Convention between France and WHO for the period 2014-2019. Signed on 2 December 2013 on the occasion of the visit of WHO Director-General, Dr Margaret Chan, to the Ministry of Foreign Affairs in Paris, the new convention underscores France’s long term support of WHO as well as the common objective of improving the health of populations around the world.

By providing support to the work of GCR, France plays an important role among the group of partners who join WHO in advancing towards its goal of global health security. French institutions such as the Institut de Veille Sanitaire but also local actors such as the Rhône-Alpes Region, the Grand Lyon, the Rhône Department and the Fondation Mérieux remain solid partners who’s technical and or financial support are essential for carrying out activities that support countries to strengthen their health systems.
Introduction
Who essential functions

The six core function that were articulated in the WHO Programme of Work provide a sound basis for describing the nature of WHO’s work. They are:

1. Providing leadership on matters critical to health and engaging in partnerships where joint action is needed;
2. Shaping the research agenda and stimulating the generation, translation and dissemination of valuable knowledge;
3. Setting norms and standards, and promoting and monitoring their implementation;
4. Articulating ethical and evidence based policy options;
5. Providing technical support, catalysing change, and building sustainable institutional capacity;
6. Monitoring the health situation and assessing health trends.
Support for strengthening capacities under the International Health Regulations

The Department of Global Capacities, Alert and Response (GCR), has the following dual mandate:

• maintain an effective global system that supports disease-control programmes to contain public health risks by assessing global trends on a continuous basis and preparing to respond to unexpected and internationally spreading events with a potential for international relevance.

• provide guidance and support to countries to build strong national public health systems that can maintain active surveillance of diseases and public health events; rapidly investigate detected events; report and assess public health risk; share information; and implement public health control measures.

The mission of GCR is therefore to coordinate the implementation of the International Health Regulations, a key WHO programme that is part of the Organization’s Global Programme of Work and is one of its six leadership priorities:

WHO Leadership priorities 2014–2019

1. Advancing universal health coverage: enabling countries to sustain or expand access to essential health services and financial protection and promoting universal health coverage as a unifying concept in global health.

2. Health-related Millennium Development Goals — addressing unfinished and future challenges: accelerating the achievement of the current health-related Goals up to and beyond 2015. This priority includes completing the eradication of polio and selected neglected tropical diseases.

3. Addressing the challenge of noncommunicable diseases and mental health, violence and injuries and disabilities.

4. Implementing the provisions of the International Health Regulations: ensuring that all countries can meet the capacity requirements specified in the International Health Regulations (2005).

5. Increasing access to essential, high quality and affordable medical products (medicines, vaccines, diagnostics and other health technologies).

6. Addressing the social, economic and environmental determinants of health as a means of reducing health inequities within and between countries.
WHO Lyon Office

GCR is comprised of two technical units. One unit is based in Geneva and ensures the continuous surveillance of infectious diseases and public health events and coordinates international response operations for major outbreaks. The second unit, located in Lyon, has the mission to provide guidance and support to countries to have in place more effective national public health systems. This unit is directly involved in the implementation of the International Health Regulations, the foundation for improving/ensuring global health security.

The importance of partnership for IHR implementation

WHO continues to strengthen its partnerships with other international and inter-governmental organizations, notably the World Food Organization (FAO), with the World Organisation for Animal Health (OIE), the International Civil Aviation Organization (ICAO), the World Meteorological Organization (WMO), the International Atomic Energy Organization (IAEA), the International Air Transport Association (IATA) and the World Bank. During response to major public health emergencies, the Strategic Health Operations Centre (SHOC) with its regional health operations centres have served as platforms for coordination of information sharing and other response activities between many organizations and actors.

WHO network of international partners for IHR implementation

IHR activities are carried out in partnership with the WHO Regional Offices in all WHO regions and in many countries thanks to the financial support of its main funding partners:

- Government of Canada
- Government of France
- Institut Pasteur
- Institut de Veille Sanitaire (InVS)
- the Rhône-Alpes Region
- the Rhône Department
- the Grand Lyon
- Government of Germany
- Government of Japan
- Government of the Netherlands
- Government of the United States
- the Bill and Melinda Gates Foundation
- the United States Centers for Disease Control and Prevention (CDC)
- the United States Agency for International Development (USAID)
- the European Union
- Government of the United Kingdom
WHO offices around the world

01. African Region
   Regional Office Brazzaville

02. Region of the Americas
   Regional Office Washington DC

03. South-East Asia Region
   Regional Office New Delhi

04. European Region
   Regional Office Copenhaguen

05. Eastern Mediterranean Region
   Regional Office Cairo

06. Western Pacific Region
   Regional Office Manila
Synergies between the WHO Lyon Office and the local and regional actors

Outre ses projets internationaux, en 2013, le Bureau OMS de Lyon a pris part à de nombreuses manifestations organisées par la communauté scientifique de Lyon. Pour un survol de ces activités, voir ci-dessous.

8 January
Participation in BioTuesday at the Boiron Amphitheatre, Faculty of Medicine and Maïeutique, Lyon Sud.

1 February
Delivery of a course on international public health policy at VetAgroSup (Marcy l’Etoile).

21 February
Technical meeting of the WHO Lyon Office, the Rhône Department, the Grand Lyon and the Rhône-Alps Region.

5 March
Participation in BioTuesday at the Rhône-Alps Region headquarters.

26-28 March
Participation in BIOVISION (8th edition) – see textbox.

8 April
Annual Statutory meeting of the WHO Lyon Office.

9 April
Meeting with Dr Christian Mally (President of the university of Lyon – Lyon Science Transfert).

16 April
Participation in the meeting of the Agence régional de santé (ARS) with regional surveillance counterparts to discuss new strategies for control of chikungunya and dengue.

16 September
Participation of Dr Isabelle Nuttall, Director, Department of Global Capacities, Alert and Response, in the round table, “Public health and development: taking action in response to the real needs”, on the occasion of the 30 anniversary of the Bioforce Institute of Lyon.

24 September
Lecture delivered to medical students at the University of Saint-Etienne as part of the course, “Medicine and developing countries”.

29-30 September

17 October
Facilitation of round table discussion, Public health emergencies, during the Journées Collaboration of Lyon Biopôle, Lyon.

17 October
Participation of WHO during the opening conference of the exhibition, “Une maladie infectieuse peut-elle mourir aussi?” organized by the Musée de sciences biologiques Dr Mérieux, Marcy l’Etoile.

5 November
Présentation sur le Système de Gestion de l’Information de Laboratoire (LIMS) lors du 4e Cours Avancé sur le Diagnostic (ACDx), organisé par la Fondation Mérieux, Les Pensières, Veyrier du Lac.

7 November
Participation of WHO in the 1er Assises nationales du vaccin, Lyon.
INTRODUCTION

The WHO Lyon Office participated in the scientific steering committee of BIOVISION on the organization of the 2013 edition (24-26 March).

The Office also contributed to discussions on priorities and objectives of BIOVISION in the context of increasing its international impact.
Review of activities and achievements of the WHO Lyon Office in 2013
The International Health Regulations is an international legal framework which is binding on 196 countries, notably for all Member States of WHO. Its objective is to help the international community -- by putting in place the prescribed measures -- to limit the spread of acute public health risks that could cross borders and subsequently pose a threat to the global community.

Infectious diseases can spread everywhere via travel and international commerce, intensified by globalization. A public health emergency in one country can lead to repercussions on the economy in many other areas of the world. This can be the result of an emerging infection, such as Severe Acute Respiratory Syndrome (SARS) or a new human influenza pandemic. The IHR also apply to other public health emergencies, including spills or waste derived of chemical substances, or the release following a nuclear accident. The IHR also aim to limit restrictions to international travel and trade while containing the spread of disease.

The IHR (2005), which came into force on 15 June 2007, call on countries to notify to WHO certain specific outbreaks and public health events. Founded on the unique experience of WHO in surveillance, alert and response, the IHR define the rights and obligations of countries pertaining to relevant public health events and lay out the different procedures for WHO to follow in to ensure global health security.

Since 15 June 2007, the International Health Regulations (2005) are being applied the world over. This legally binding instrument contributes to international health security because it provides a new framework for coordinated action in the face of public health events that could present a public health emergency of international concern. It guides all countries so that they can better detect, evaluate and notify public health threats and better respond to the challenges they present.

Since the launch of the IHR (2005), States Parties to the Regulations had up to two years (2007-2009) to evaluate their capacities and develop national action plans, followed by three years (2009-2012) to meet the requirements of the IHR in terms of national surveillance and response systems as well as the particular requirements at designated ports, airports and some ground
crossings. Certain countries were able to obtain a two-year extension (2012-2014) and in certain exceptional circumstances, it may be possible to request an additional extension for a maximum of two more years (2014-2016).

For the period 2012-2014, 118 out of 196 countries requested and obtained an extension for meeting the IHR requirements. Forty-two countries have indicated that an extension is not needed.

The IHR require countries to strengthen their public health surveillance and response capacities. WHO, and in particular its office in Lyon, work in close collaboration with countries and its partners to provide recommendations, technical assistance and the necessary resources for implementation of the IHR.

The data from self-evaluations reveals that countries have made progress in terms of strengthening some of the core capacity requirements, particularly in the area of zoonoses (with an overall average score of 82%), surveillance and response (80% for both), laboratory capacity (76%), coordination and risk communication (75% and 74% respectively), legislation and food security (73% for both). Conversely, countries have indicated relatively weak capacity in the area management of radiological events (55%) and chemical events (56%) and at points of entry and human resources development (58% and 61% respectively).

Concerning application of the Regulations at points of entry (ports, airports and ground crossings), technical support missions are being carried out to evaluate the existing capacities in countries. In addition, consultations, training sessions, meetings and workshops have been delivered in order to develop the required competencies and provide technical guidance for public health experts at points of entry in several WHO regions. Particular areas of focus are: updating the learning programme for the inspection of ships and the issuance of ship sanitation certificates; providing guidance on the management of public health events on board ships or aircraft; vector surveillance and vector control following a multisectoral approach. Moreover, the WHO Lyon Office helps put in place WHO recommended procedures for the certification of airport and ports in accordance with the requirements of the Regulations. To facilitate the exchange of information, the Lyon Office provides support in favour of an initiative to designate WHO collaborating centres for points of entry with the objective to develop and/or strengthen the core capacities.

In the area of national surveillance, the Lyon Office began, with the participation/collaboration of the six Regional Offices, to develop guidance on early warning and response with a focus on event-based surveillance. Guidance on coordination of health surveillance between points of entry and national health surveillance systems is also under development. To facilitate and accelerate regular (weekly) exchange of surveillance data from public health entities from the
peripheral level through to central level, WHO is finalizing an electronic tool based in part on mobile telephone technology. Finally, the Lyon Office is developing a toolkit for epidemiologists, targeting programme organizers, coordinators and trainers who will be able to adapt the materials for delivery in the field or in public health schools as appropriate. In this way epidemiologists and other health professionals will have a common understanding, set of learning materials and quality norms and standards, which will contribute to a harmonized approach to understanding and applying the Regulations.

In terms of the application of the IHR in the face of specific risks, significant progress has been made (in collaboration with FAO and OIE) concerning the refinement and updating of reference materials on good governance in the animal and human health sectors. WHO and the OIE have recently developed harmonized documentation and guidance for their respective sectors to help countries objectively evaluate their systems, resolve problem areas, and develop the necessary capacities to be able to improve their operational capacity and meet their international obligations. To resolve problems related to the human-animal interface, a common / shared OIE-WHO programme of work was developed in April 2013. It consists mainly of adapting the assessment tool used to assess progress regarding attainment of core capacities in countries to be better take into account the human-animal interface; this process is also helping to improve the WHO laboratory assessment tool as well as its compatibility with the relevant OIE tool. In partnership with the World Bank, and the OIE, the WHO Lyon Office has been developing a joint methodological guide which will regroup these updated guides with the goal of strengthening management of national human and animal health systems.

WHO continues to focus on support to States Parties to evaluate their needs and required resources towards the attainment and maintenance of core capacities. A pilot IHR costing tool was developed with WHO and its partners in 2013 and is currently being tested in a number of countries. This tool has been adapted to fit the IHR surveillance assessment tool currently under use and takes into account existing tools, analyses and methodologies.

Further, a meeting of the working group on events
of chemical origin -- which grew out of the global health security agenda -- and a seminar on management of chemical events under the IHR framework were organized in Lyon (France) in April 2013 to take stock of existing tools and measures taken by countries participating in the initiative and in support of IHR implementation. Given that the strategic approach to management of chemical events and IHR share common objectives, for example encouraging multisectoral coordination and strengthening of capacities, WHO is working to raise greater awareness among stakeholders of the need to maximize potential synergies between the chemical sector and the IHR (2005). This is being done via regional workshops on the core capacities and information sharing between sectors.

In order to strengthen national and regional capacities as well as WHO’s capacities for response in the face of radiological emergencies, in November 2013 WHO, in collaboration with IAEA, FAO, ICAO, the WMO and other international organizations, carried out an international exercise (ConvEx-3 (2013)), a simulation exercise of a terrorist attack in Morocco. The objective was to test the notification mechanism set out in the IHR, as well as WHO’s capacity to respond to a radiological emergency.

Another example illustrates the role of WHO headquarters and of the Global Capacities Alert and Response Department following the emergence of the new coronavirus in 2012 (since referred to as Middle East Respiratory Syndrome coronavirus (MERS-CoV)). The Department, and its laboratory capacity strengthening team in Lyon, are working in close collaboration with Member States, National IHR Focal Points and partners to monitor the epidemic and respond in accordance with the Regulations. The IHR provided the necessary legal framework for management of the MERS-CoV response and for the second time since the entry into force of the Regulations in 2007, the WHO Director-General convened an emergency committee to advise her and to learn whether or not this event constituted a public health emergency of international concern and which health measures could become necessary in order to respond in the most efficient manner. The emergency committee has met five times since July 2013.

A more detailed account of the activities carried out by the technical teams of the WHO Lyon Office is below, presented by technical area of work.
REVUE DES ACTIVITÉS ET RÉALISATIONS DU BUREAU OMS DE LYON EN 2013
The health laboratory strengthening team began the year by redefining its strategic objectives for the following five years (2013-2017). An international meeting of public health laboratory experts was convened from 16-17 January in Lyon to finalize the strategy and advise the team on its implementation. Six objectives were identified for laboratory strengthening in terms of improved preparedness, surveillance and response in the face of epidemic prone diseases:

1. Strengthen national laboratory system policies and strategic plans
2. Support implementation of laboratory quality systems
3. Enhance networking between laboratories with public health responsibility and with surveillance and response systems
4. Increase domestic testing capacity in range and volume
5. Support laboratory workforce development
6. Contribute to WHO leadership and coordination role in global laboratory strengthening forums.

These six objectives will be achieved by means of both normative (development of guide, manuals and tools) and operation projects implemented in the field.
In the area of training, in collaboration with the University of Sydney, Australia, the team developed the curriculum and training materials for a new course on leadership and management for laboratory directors. This course will enable laboratory managers in resource limited countries to attain, or strengthen their competencies via face to face trainings, distance learning and implementation of individual projects. The first cohort is planned to take place in the Eastern Mediterranean Region during the first quarter of 2014.

In addition, the team coordinated the development of technical recommendations for laboratory testing for MERS-CoV. The team participated in the annual ISO Technical Committee 212 meeting (in Singapore, from 19-21 November 2013). This technical committee is responsible for developing ISO norms in the area of medical laboratory and in vitro diagnostic medical devices.
The team also contributed to the development of several guides for the WHO regions:

**African Region**


- Guide for national laboratory systems (English, in press)


**Mediterranean Region**

- Quality implementation in laboratories using a stepwise approach – essential criteria and implementation strategy (English, in press)

Finally, the team organized a meeting of experts on laboratory information management systems from 7-8 October 2013 at the WHO Lyon Office

This meeting served as a platform to review needs and solutions concerning information management systems for laboratories with limited resources. Among other recommendations, WHO is to develop technical guides on needs assessment and on the minimum functional requirements of such systems.
This project aims to strengthen diagnostic capacities in 13 countries in Africa and Asia, but also to improve transfer of data to surveillance systems, set up quality assurance and biosafety systems and support national or regional emerging diseases networks. This project is carried out via training and coordination activities, purchase of equipment or essential reagents, and provision of external quality assessment and supervision. These projects are mainly implemented by WHO's technical partners (collaborating centres, universities, reference laboratories, Pasteur Institutes…) or consultants, under the coordination of the WHO Country and Regional Offices. The WHO Lyon Office team is responsible for the global coordination of the project and acts as the interface between the Regional and Country Offices, the beneficiary institutions (FAO, OIE), and coordination with the donor, USAID. The Lyon Office staff are on occasion involved in technical activities, either as co-facilitators or co-organizers. Certain ground-breaking activities were carried out under the scope of this project in 2013, such as a training workshop on the aforementioned quality stepwise implementation tool (Cambodia), the organization of a regional meeting on laboratory strengthening for emerging diseases in Asia (Philippines), trainings on leptospirosis diagnosis for reference laboratory staff in Indonesia, publication of a guide on antimicrobial resistance in Africa (cited above), external quality assessment for Dengue in Asia and the continuation of the Microbiology External Quality Assessment Programme in Africa, the organization of a training on quality for laboratories in Central Africa (Republic of Congo), trainings on viral haemorrhagic fevers, influenza, Japanese encephalitis or hantavirus for several African or Asian reference laboratories, support to the functioning of the network of laboratories in Thailand and support to detection of epidemics (blood samples, transport of samples, diagnostics).

The team continued its support to regional laboratory networks, such as PulseNet Middle-East, with training on characterization of bacteria responsible for diarrhea, or LabNet in the Pacific region (co-facilitation of the annual meeting co-organized by WHO and the Secretariat of the Pacific Community).

The team was directly involved in several missions to evaluate public health laboratories in the Middle East (Egypt, Iran, Morocco, Qatar, Yemen). Support to the Mediterranean Region was particularly important this year with the continuation of the microbiology external quality assessment programme, but also in terms of support to a regional laboratory strengthening strategy, for which the preparatory work was developed during a meeting of experts in Jordan in December. This strategy will be finalized in 2014 and the office will fully support its implementation.

The laboratory twinning programme continued, notably with programmes between reference laboratories in Turkey and in Germany; the Pasteur Institutes of Paris and Bangui and the Public Health Laboratory of Central African Republic; the public health laboratory of Jordan and the US Centers for Disease Control; the national laboratory of the Maldives and the faculty of medicine in Sydney Australia; the national laboratory of Paraguay and a public health laboratory in the USA; and the initiation of a new project between the national public health laboratories of Malaysia and Yemen.

Thanks to the funding support of the World Bank and the OIE, the team was also able to provide support to projects in favour of antimicrobial resistance surveillance, at times in collaboration with veterinary services for certain bacteria that affect humans and animals, in Albania, Cambodia, Mongolia, the Samoan Islands, and Tajikistan.
The team was also designated focal point for laboratory on the WHO Taskforce for Middle East Respiratory Syndrome Coronavirus (MERS-CoV). As such, in addition to the aforementioned publication of recommendations on testing, the team also ensured information sharing between the WHO offices and reference laboratories, supervised the provision of positive quality control materials in collaboration with the European Virus Archive, and launched a project on comparative analysis of the performance of serological testing, which will continue in 2014, in order to improve diagnostic capacity in this infection.
02.

Points of entry: ports, airports and ground crossings

The IHR call on countries to maintain public health measure and efficient response capacities at designated ports, airports and ground crossings. These measures can help to ensure protection of the health of travellers and populations, ensure that ships, airplanes and ground transport to continue to circulate, secure and free from infection and contamination, contain risks at the source and carry out public health measures while limiting unnecessary disruption to international travel and trade. It is the mission of the Ports, airports and ground crossings team to strengthen public health capacities and ports, airports and ground crossings.
Support to countries at normative level

L’équipe des points d’entrée a choisi de poursuivre en priorité l’élaboration de guides visant à assurer:

- public health events management on board ships and on aircraft;
- vector surveillance and control (in collaboration with the department for Neglected Tropical Diseases);
- procedures for voluntary WHO certification at ports and airports of Member States who wish to verify and certify that the minimum IHR core capacities are in place (this project benefits from targeted funding from the French Ministry of Health and Social Welfare);
- coordination surveillance systems, surveillance at points of entry and national health systems (in coordination with the Field Epidemiology and Surveillance Networks team).

The translation of guidance documents developed by the team into the WHO official languages is currently underway, or nearing completion (into Arabic, English, French, Russian and Spanish).

In collaboration with the Human Resources Development and Training team, in 2013 the Points of Entry team developed a specific training programme on ship inspection and delivery of ship inspection control certificates thanks to the funding support of GIZ, Germany and the European Commission. This programme comprises both an online course, as well as all the materials needed for face-to-face activities, translated into several languages (Arabic, English, French, Portuguese, Russian, Spanish and Turkish). This programme aims to increase the number of ports authorized to issue ship sanitation control certificates. It was initially delivered in 2012 as a pilot project, then delivered in 2013 in all six WHO regions. The second version of the course was launched at the end of 2013 and will be available in 2014, along with the manuals and materials to guide the face-to-face sessions.
Support to countries at operational level / technical support

One of the key projects led by Points of entry team, “Strengthening health security at ports, airports and ground crossings,” has benefitted since July 2013 from the funding support of the European Commission (Directorate-General for Development and Cooperation).

This project comprises the following activities:

- international collaboration: development of the networks for sharing information and competencies (for example, PAGNet);
- development of guidance, technical tools and training programmes for points of entry;
- delivery of technical assistance to countries who are working on strengthening their public health capacities.

To launch the WHO/European partnership contribution agreement, a kick-off meeting was held with the EC and all other stakeholders on 25 September 2013 in Brussels.

As a result of the support of the EC, some countries in the Eastern-Mediterranean were subsequently able to organize trainings at regional level on ship inspection and issuance of ship sanitation certificates. A national training was also carried out in Uzbekistan, with the support of the WHO Regional Office for Europe.

Under the scope of the project on Health security strengthening at ports, airports and ground crossings, in 2013 the team also provided technical assistance towards the development of the following regional trainings:

- **AMRO** — Brazil, 10-23 March
  Training on ship inspection and delivery of ship inspection control certificates

- **EMRO** — Jordan, 25-29 March
  Implementation of core capacities under the IHR at points of entry in Jordan and Iraq

- **EURO** — Turkey, 15-19 April
  Training on ship inspection and delivery of ship inspection control certificates

- **WPRO** — China, 23-26 April
  Strengthening IHR core capacities at designated points of entry

- **SEARO** — India, 24-26 June
  Implementation of core capacities under the IHR at points of entry and training on ship inspection and delivery of ship inspection control certificates

- **EMRO** — Qatar, 10-14 November
  Training on ship inspection and delivery of ship inspection control certificates
The Points of entry team also contributed to the development of the following missions:

- **EURO — Spain, 8-10 May**
  Implementation of MARSEC exercise at the port of Malaga, including emergency simulations based on the guide developed by the Points of entry team on the management of public health events on board ships. The team provided technical support on the preparation and debriefing of the exercise. The MARSEC exercise significantly contributed to the finalization of the guide.

- **SEARO — India, 26-28 June**
  Regional meeting on IHR core capacity requirements at points of entry.

- **EMRO — Qatar, 28 September – 4 October**
  Evaluation of implementation of IHR core capacities and recommendations for development of national action plan for IHR at points of entry.

- **WPRO — China, 8-12 October**
  Technical consultation to facilitate cooperation between HQ and the General Administration of Quality Supervision, Inspection and Quarantine (AQISQ), and also to celebrate the 140 years of the China Health Quarantine.

- **AFRO — Algeria, 19-24 October**
  Evaluation of core capacities at points of entry under the IHR (2005) in view of developing a national action plan by national authorities based on the recommendations of the evaluation team.

- **EURO — Uzbekistan, 24-30 November**
  Participation in training round tables for national experts on IHR (2005) implementation at points of entry.

- **EMRO — Jordan, 12-14 December**
  Regional partners meeting to review implementation of the IHR (2005).

- **AFRO — Algeria, 17-23 December**
  Presentation of the national action plan by Algerian health authorities developed further to the October mission.

Support to international networks

**PAGNet**

PAGNet seeks to bring together public health workers and staff responsible for ship inspections at points of entry to facilitate sharing of information for strengthening health security at ports, airports and ground crossings. This includes information for preparedness and response during public health emergencies that affect international travel and transport. The regular exchange of information was particularly important in 2013 during the MERS-CoV (Middle East Respiratory Syndrome) and influenza H7N9 events. In 2013, 63 new public health/port authority staff joined the PAGNet community, bringing its total membership to 255 members from 66 countries.

PAGNet also facilitates face to face exchanges by hosting technical meetings.
International collaboration

The points of entry team works with many international organizations:

Atomic energy

IAEA, the International Atomic Energy Agency: the Points of entry team and the WHO Radiological events team based in Geneva provide technical support via:

- **IARCNE ConvEx Exercise 21-22 November, Morocco**
  The Air and Maritime Transportation ad hoc working group (WG-AMT) is a subgroup of the Interagency Committee on Radiological and Nuclear Emergencies (IARCNE); its objective is to coordinate procedures between intergovernmental organizations to prepare and respond to nuclear or radiological emergencies.

Maritime transport

- **SHIPSAN ACT Joint Action**
  The objective of this project is to provide support to member states of the European Union facing public health events caused by radiological events including infectious diseases, and also support with IHR implementation. Representatives of the Points of entry team in its role as member of the executive board, as well as of the WHO Regional Office for Europe, participated.

  - **Kick-off meeting, Athens, Greece 28 Feb. - 01 March, Athens, Greece**
    Representatives of the Points of entry team in its role as member of the advisory board, as well as of the WHO Regional Office for Europe, participated at this kick-off meeting.

Air transport

- **International Civil Aviation Organization (ICAO) - CAPSCA - Cooperative Arrangement for the Prevention of Spread of Communicable Disease through Air Travel 18-21 June, Switzerland**
  Le projet AIRSAN, qui a pour objet de soutenir les Etats membres de l’Union Européenne en garantissant une réponse organisée et cohérente aux évènements de santé publique dans le transport aérien, a organisé sa réunion de lancement le 18 juin 2013 à Berne. L’équipe des Points d’entrée y a été représentée en tant que membre du Conseil consultatif de même que la région OMS EURO.

  - **WHO Informal Consultation Meeting in collaboration with UNWTO, ICAO, IATA, ACI (CAPSCA partners) 18 June, Switzerland**
    The team organized a consultation meeting, which focused on reviewing the guide on the management of public health events in air transport and on certification procedures at points of entry.
Global health security cannot be attained unless all countries have effective surveillance and response systems to detect, assess and respond to public health risks.

The role of the Field epidemiology, surveillance and networks team is to support countries in acquiring, or strengthening their surveillance and response systems by producing guides and tools, supporting their implementation, and strengthening human resources.

The team also participated in the leadership of WHO in contributing to coordination efforts and advocacy in favour of IHR implementation.
Support to countries at normative level

In 2013, the team continued the development of a guide to improve coordination of epidemiological surveillance between national surveillance systems and point of entry (ports, airports and ground crossings).

- During 2013, three consultation (19-21 March, 11-12 September, 17-19 December) bringing together national experts, technical partners, donors and WHO staff, were organized in Lyon to develop this guide.
- This document will enable health authorities to develop and/or strengthen their early warning systems notably by taking into account information from sources other than those from the health system. This process is known as “event-based surveillance”.
- A version ready for dissemination will be available in the first quarter of 2014.
- The next steps will involve facilitating intersectoral collaboration in the surveillance sector, obtaining validation of the guide from the countries, having it translated into the six WHO official languages, and developing the accompanying materials (training, procedures, etc.) and providing support for its implementation.

To help countries attain and or strengthen their capacities for early detection and response to health events, and to take into account advances in surveillance techniques, the team also initiated the development of an early warning guide:

- During 2013, three consultation (19-21 March, 11-12 September, 17-19 December) bringing together national experts, technical partners, donors and WHO staff, were organized in Lyon to develop this guide.
- This document will enable health authorities to develop and/or strengthen their early warning systems notably by taking into account information from sources other than those from the health system. This process is known as “event-based surveillance”.
- A version ready for dissemination will be available in the first quarter of 2014.
- The next steps will involve facilitating intersectoral collaboration in the surveillance sector, obtaining validation of the guide from the countries, having it translated into the six WHO official languages, and developing the accompanying materials (training, procedures, etc.) and providing support for its implementation.
Support to countries at operational level / technical support

Accompanying the guide on coordination between national surveillance systems and points of entry, the team co-directed, together with the Istituto de Sanita’ d’Italie (ISS) a work package under the scope of EpiSouth Plus, financed by the European Commission. This project targets 27 countries in the Mediterranean and the Balkans. Under this work package, four missions to analyse communications between national health systems and points of entry were carried out in Italy, Malta, Jordan and Morocco. A detailed mission report was produced for each of these missions. A strategic document resuming the strengths and weaknesses of the systems assessed is currently being finalized.

In collaboration with the training team, a set of materials were developed to train epidemiologists on the IHR. The set includes 10 modules on different IHR-related subject areas (international organizations and networks; national IHR focal points; national legislation; health systems; core capacities; planning, monitoring and evaluation; risk assessment; management of health emergencies; risk communication). It also includes elements necessary for organizing training sessions of different lengths. These materials will be available online and on CD ROM. Another objective is to integrate the materials into field epidemiology training programmes (FETP).

To improve and validate the material, a first training session was organized from 20-24 August in Tunisia together with the WHO Regional Office for the Eastern Mediterranean and the Eastern Mediterranean Public Health Network (EMPHNET), an association which regroups all of the FETPs in the region. Twenty-seven epidemiologists and public health professionals from the 10 countries attended, and confirmed the need for IHR training as part of learning for epidemiologists.

A tool for data gathering of epidemiological information, analysis and sharing, was finalized. It includes an SMS application that facilitates the rapid transmission of epidemiological data to all levels of the health system from structures that do not have access to Internet. Countries wishing to use this tool have been identified and implementation will begin in 2014.
04.

Human resources development and training

Strengthening competencies and attitudes of health personnel is essential to maintain surveillance and response capacity at all levels of health systems and for effective IHR implementation. The revised IHR call on Member States to have in place the necessary capacities to detect and notify events that may constitute a public health event of international concern. Sufficient human resources are indispensable in order to meet this objective.
Training on the IHR: a new approach

Building on the achievements of the IHR implementation course, WHO is setting-up a comprehensive approach to learning and human resources development on “Health Security under the IHR framework” geared at both individual and institutional levels. This approach, validated by the technical programmes, the tools and materials developed for the IHR programme, seek to: foster an increased number of professionals around the world that share a common approach to interpreting and applying the IHR; support countries to appropriate and institutionalize training on IHR; and facilitate adaptation of the programmes and activities according to their respective national contexts.

To support implementation of this approach, the Human resources development and training team began to work on two parallel projects: development of an elearning platform on “health security under the IHR framework” and the design and development of the IHR Training Toolkit.

The new platform will make it possible to host information on all existing IHR-related training activities, as well as different web based training applications and knowledge management systems (discussion groups, webinars, wikis, etc.). This information and applications will be made available to WHO partners all over the globe.

Development of a multi-purpose IHR learning kit

The learning kit, to be launched in 2014, is comprised of a complete set of IHR-related training programmes, materials and pedagogical tools. The scope and contents of this kit were designed for use by institutions and organizers from different sectors (public health, food and agriculture, transport, travel and trade, education, defence) to strengthen the capacities of professional working in different IHR related sectors.
Support to countries at operational level / technical support

During 2013, the Human resources development and training team continued its mission to support GCR teams in the design and implementation of training programmes to strengthen IHR capacities.

1. Learning programme on ship inspection and issuance of ship sanitation certificates

Working together, the Human resources development and training and Ports, Airports and Ground Crossings teams developed a ship inspection learning programme. This programme is comprised of two components: an online training programme which makes it possible to improve or acquire knowledge on carrying out ship inspections and also provides a methodological approach for facilitating hands on workshops in which course participants can practice their newly acquired knowledge and competencies via simulation exercises and actual ship inspections.

The programme is now available in seven languages (Arabic, Chinese, English, French, Portuguese, Russian and Spanish). The online component was able to accommodate 400 participants, of which at the time of writing, 100 have completed the course and received their certification.

Numerous regional, national, and port authorities have since contacted WHO in order to organize ship inspection trainings targeting their own ship inspectors.

2. Tutorial for Notification Assessment Under the IHR

This training was developed by the IHR Regulations and procedures team. The Human resources development and training team contributed to its pedagogical development and to the development of online exercises 1 and 2. The tutorial is based on 5 quick exercises that allow relevant staff at country level to become familiar with the decision instrument and notification of events that may constitute a public health event of international concern and allow them to benefit from the feedback of experts that contributed to the development of the scenarios.

3. Early Warning and Events Based Surveillance

In collaboration with the team working on Field epidemiology, surveillance and networks and with the contribution of the six WHO Regional Offices, the Human resources development and training team developed and IHR training kit targeting epidemiologists. This training kit was test run during a workshop organized in collaboration with the Eastern Mediterranean Public Health Network (EMPHNET) and the WHO Regional Office for the Eastern Mediterranean in Amman, Jordan in August 2013.

The field test proved the pertinence and effectiveness of this tool and of the proposed dissemination approach; it also provided significant information on the development and/or revision of the contents in certain specific areas, as well as on the structure and accessibility of the IHR learning kit on the web.

4. Mapping of training programmes and activities

This activity, carried out throughout 2013, made it possible to:

- map the different training programmes and activities developed under the scope of the IHR within GCR, that were made available to WHO partners;
- capture and share best practice as well as learning drawn from the analysis, design, development, implementation and evaluation of the above training programmes and activities;
- promote norms/best practice for the analysis, design, development, implementation and evaluation of training programmes and activities.
5. **Support to the design and development of online training**

The team provided support to the design, development, and revision of online trainings:

- Simulation exercises (led by the Monitoring, information and procedures team);
- Laboratory leadership course (led by the Health laboratory strengthening and laboratory biosecurity team);
- Transport of infectious substances (Health laboratory strengthening and laboratory biosecurity team).

6. **Support to the design and development of online training**

The team contributed to the facilitation of workshops, seminars and training sessions delivered by the department (event based early warning and surveillance, strategies and plans, performance management development).
Future directions
The procedures set out in the International Health Regulations (2005) for the management of major public health emergencies, notably the convening of an Emergency Committee, continue to be followed. This has made it possible for WHO to apply to a new context the lessons learned from the A (H1N1) pandemic 2009. The usefulness of notifying unusual events and rapidly sharing information have once again been proven.
All levels of WHO and the Lyon Office in particular, have intensified efforts and will pursue their technical support to countries in all priority technical areas.

Progress was made towards IHR implementation at national level in 2013, nevertheless, more effort will be needed in 2014, and beyond 2016 to attain and or maintain the core capacities. At the same time, efficient and rapid application of the Regulations faces institutional and resource problems, mainly because of unequal support by the various stakeholders towards attaining the minimum capacities, or because of the specific risks encountered in the WHO regions on in particular geographical zones. In this context, the actions of WHO funding partners should be aligned with the priorities identified by WHO and should target the most vulnerable countries.

Although certain capacities have been strengthened on a global level (notably in the areas of surveillance, laboratories and risk communication), capacity strengthening efforts must be maintained over the long term. The relatively weak level of capacities that make it possible to respond to radiological and chemical events reveals a weakness which could be remedied by means of a systematic mapping of the stakeholders working in this area, some of whom have not established solid relationships with the ministries of health.

Capacities at points of entry remain a challenge, however many guidelines have been developed and are available in different languages to facilitate a heightened awareness of the challenges and encourage training. Human resources is another core capacity that remains weak, and it is up to the countries to commit to building and maintaining the necessary human resources over the long term for each core capacity in the IHR.

The WHO Lyon Office will therefore pursue its efforts to support countries in strengthening the above mentioned technical areas.

In addition, it is probable that many States Parties will request a renewed 2-year extension, from June 2014-June 2016, and the WHO Lyon Office will continue to accompany the countries in their capacity building efforts.

Finally, the WHO Director-General has called on countries to secure their participation in a series of high-level events that will contribute to maintaining the commitment towards reinforcing their capacities, stressing the importance of national engagement and a multisectoral approach. The Department, Global Capacities Alert and Response and Response and its WHO Lyon Office will support the efforts to attain the global capacity required to prevent and detect infectious disease threats and other risks, whether their origin be of natural or chemical causes, accidental or deliberate, and respond rapidly and effectively. The countries and the international organizations and partners from all sectors must define and engage in tangible actions to be able to make progress and attain this objective.
Annexes
Publications and reference tools for IHR implementation 2013

LABORATORY, BIOSAFETY AND BIOSECURITY

- **Laboratory quality management system: handbook**

  The Laboratory quality management system handbook is intended to provide a comprehensive reference on Laboratory quality management systems for all stakeholders in health laboratory processes, from management, to administration, to bench-work laboratorians.

  This handbook covers topics that are essential for quality management of a public health or clinical laboratory. They are based on both ISO 15189 and CLSI GP26-A3 documents. The handbook is linked to the training toolkit on laboratory quality management system.

  Originally published in English, the handbook is now also available in French and Russian.

  - **EN:** [www.who.int/ihr/publications/lqms/en/](http://www.who.int/ihr/publications/lqms/en/)
  - **FR:** [www.who.int/ihr/publications/lqms/fr/](http://www.who.int/ihr/publications/lqms/fr/)
  - **RU:** [www.who.int/ihr/publications/lqms/ru/](http://www.who.int/ihr/publications/lqms/ru/)

- **Quality manual template**

  The quality manual template is a supplement to the laboratory quality management system training toolkit, Module 16 - Documents and records.

  This quality manual template is based on internationally-accepted standards, and provides guidance for public health and clinical laboratories on writing policies and procedures that support a quality management system. It comprises a main document providing information and examples to assist with writing a laboratory quality manual, and 24 appendices (examples of standard operating procedures, forms, and processes). All documents are in Word format because they are meant to serve as templates and are thus modifiable. The individual laboratories are required to customize the text of the template to the local situation.

  The quality manual template is now also available in French and Russian.

  - **EN:** [www.who.int/ihr/publications/lqms/en/](http://www.who.int/ihr/publications/lqms/en/)
  - **FR:** [www.who.int/ihr/publications/lqms/fr/](http://www.who.int/ihr/publications/lqms/fr/)
  - **RU:** [www.who.int/ihr/publications/lqms/ru/](http://www.who.int/ihr/publications/lqms/ru/)

- **Laboratory quality stepwise implementation tool**

  This tool provides a series of concrete activities that can be carried out in laboratories on a daily basis, and includes a sample procedures template and other documents that can be downloaded, with the objective of progressively implementing a quality management system in accordance with the requirements of ISO 15189.

  - **EN:** [www.who.int/ihr/training/laboratory_quality/quality_manual/en/](http://www.who.int/ihr/training/laboratory_quality/quality_manual/en/)

  The French and Russian versions are under translation.

PORTS, AIRPORTS AND GROUND CROSSINGS

- **Ship sanitation inspection and issuance of ship sanitation certificate learning programme**

  This programme targets ship inspectors working at ports and responsible for delivering ship sanitation certificates. The programme is available on the IHR training site in several languages (English, Estonian, French, German, Portuguese and Turkish). Two learning methods are possible: the e-learning module, which requires approximately 15 hours of work online (this version is also available in Arabic and Russian), or on site training with simulation exercises and actual inspections on location. The programme seeks to improve and harmonize current ship sanitation practices in ports all over the world, as called for in the IHR 2005 ship sanitation requirements. Additional tools have been developed to support ship inspectors before, during, and three to six months after the training programme.
• **Manual for the inspection of ships and issuance of ship sanitation certificates**

This handbook is intended to be used as reference material for port health officers, regulators, ship operators and other competent authorities in charge of implementing the IHR (2005) at ports and on ships. The handbook is based on the IHR (2005) provisions regarding ship inspection and issue of SSCs. They provide guidance for preparing and performing the inspection, completing the certificates and applying public health measures within the framework of the IHR (2005).

- **FR:** [www.who.int/ihr/publications/handbook_ships_inspection/fr/](http://www.who.int/ihr/publications/handbook_ships_inspection/fr/)
- **SP:** [www.who.int/ihr/publications/handbook_ships_inspection/es/](http://www.who.int/ihr/publications/handbook_ships_inspection/es/)
- **EN:** [www.who.int/ihr/publications/handbook_ships_inspection/en/](http://www.who.int/ihr/publications/handbook_ships_inspection/en/)
- The manual is also available in Estonian, German and Turkish: [www.who.int/ihr/publications/handbook_ships_inspection/en/](http://www.who.int/ihr/publications/handbook_ships_inspection/en/)

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**OTHER TRAINING AND SELF-LEARNING TOOLS**

• **Training course for epidemiologists, Amman, Jordan, 20-24 August 2013**

The International Health Regulations (IHR) training course for epidemiologists was co-organized by the World Health Organization and the Eastern Mediterranean Public Health Network (EMPHNET). The course was delivered from 20-24 August 2013 in Amman, Jordan, to 27 participants (including FETP fellows and directors, epidemiologists working at central level in the Ministries of Health, National IHR Focal Points and public health policy maker) from 10 countries in the Eastern Mediterranean region (Afghanistan, Egypt, Iraq, Jordan, Morocco, Oman, Pakistan, Sudan, United Arab Emirates and Yemen). The overall objective of this course was to reinforce the capacities of current and future epidemiologists of the Region to effectively contribute to IHR implementation in their countries. The IHR training toolkit for epidemiologists was field tested, and the results will be used to consolidate the design and content of a 5-day IHR training package for epidemiologists. This package is one of the major components of the web-based IHR training toolkit for epidemiologists. The toolkit will be released to assist relevant institutions (FETPs, Schools of Public Health, Ministries...) to integrate IHR components in their training programmes/activities at country level.

• **Tutorials on the use of Annex 2 of the International Health Regulations (2005)**

The second web-based tutorial for training National IHR Focal Points on the use of IHR Annex 2 on notification assessment has been launched. The tutorial provides a number of scenarios in which NFP personnel assess whether the events must be notified to WHO. Following the completion of each scenario the user is provided with the responses proposed by an expert panel as well as explanations for these responses. The purpose of the IHR Annex 2 tutorials is to support staff of all NFPs in increasing the sensitivity and consistency of the notification assessment process. This tutorial is based on the recommendations made by the IHR Review Committee and is accessible under:

- [https://extranet.who.int/ihr/training/enrol/index.php?id=73](https://extranet.who.int/ihr/training/enrol/index.php?id=73)

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**NEWSLETTERS**

• **IHR News – news bulletin on IHR implementation**

This news bulletin provides information on IHR implementation and provides updates and links on new guidance and reference tools.

- [www.who.int/ihr/ihrnews/en/](http://www.who.int/ihr/ihrnews/en/)

• **World Health Organization /WHO Lyon Office newsletter**

Specifically developed for the partners of the WHO Lyon Office, this newsletter presents highlights of the scientific activities of the Office.
Collaborative institutions

United Nations agencies

• International Atomic Energy Agency (IAEA) Vienna Austria
• International Civil Aviation Organization (ICAO) Montreal Canada
• International Maritime Organization (IMO) London United Kingdom
• United Nations Food and Agriculture Organization (FAO) Rome Italy
• United Nations World Tourism Organization (UNWTO) Madrid Spain

WHO Collaborating Centres

• Bureau of Laboratory Quality Standards (AQSIQ) Nonthamburi Thailand
• General Administration of Quality Supervision, Inspection and Quarantine of the People’s Republic of China (Peking) China
• Pacific Paramedical Training Centre South Wellington New Zealand
• Royal Tropical Institute (KIT) Amsterdam The Netherlands

Funding partners

• Centers for Disease Control and Prevention (CDC) Atlanta, GA United States of America
• Defence Threat Reduction Agency (DTRA) Washington, DC United States of America
• European Commission (EC) Brussels Belgium
• Institut de Veille sanitaire (INVS) Paris France
• Ministry of Health and Social Welfare (Paris) France
• Ministry of Health and Social Welfare Madrid Spain
• United States Agency for International Development (USAID) Washington, DC United States of America

Technical partners

• EpiSouth - Network for Communicable Disease Control in Southern Europe and Mediterranean Countries Rome Italy
• Hamburg Port Health Centre Hamburg Germany
• National Health Surveillance Agency (ANVISA) Brazil Brazil

ANNEXES
### ANNEXES

- Pasteur Institut
- Robert Koch Institute
- Training Programs in Epidemiology and Public Health Interventions Network
- World Organisation for Animal Health

#### Official WHO partners

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