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Organization**

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# **ANNUAL REPORT 2017**

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**Keep the world safe,  
Improve health,  
Serve the vulnerable**

# ANNUAL REPORT 2017

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## Executive summary

The goal of WHO is to build better and healthier lives for all people all over the world. The WHO country office in Egypt works in partnership with the Government of Egypt to ensure the highest attainable level of health for the Egyptian people. This annual report of the WHO country office in Egypt demonstrates the work and key achievements in 2017 in areas of strategic importance, namely: health systems strengthening towards universal health coverage; promoting health through the life course; non-communicable diseases; communicable diseases; and preparedness, surveillance and response to health emergencies.

## Health systems

Universal health coverage (UHC) – ensuring that all people have equitable access to needed health services, when and where they need them, without suffering financial hardship – is an overarching WHO principal and a main goal for health reform. In Egypt, UHC was identified as a priority objective for health sector development. Egypt's constitution of 2014, article 18, has put the country on track for progressing towards UHC, while the newly endorsed Social Health Insurance (SHI) law established the legislative mechanism to fulfil the constitutional mandate and will be an important instrument to make UHC a reality.

**WHO** has been a key partner in the development of the Social Health Insurance law in Egypt, providing extensive technical support through building capacity and knowledge of stakeholders, beginning with the Ministry of Health and Population (MoHP), with convening expertise from the various levels of WHO.

**WHO** is also working with the Government of Egypt to find options to improve the health financing system. This has entailed technical support at the policy level, and evidence generation for developing a financial coverage system based on the Egyptian social health insurance model, as well as other mechanisms to ensure adequate funding for health and diminished out-of-pocket expenditure. Activities during 2017 included evidence generation such as: a costing study of health services; National Health accounts disease-specific expenditures; catastrophic expen-

diture assessment; and health financing system review.

WHO support to health systems also included providing key evidence for, for example: health service delivery assessment of the family health model; patient safety standards; strengthening the “data warehouse” of the health information system; admission, discharge and transfer (ADT) information; and access to essential medicines and health technologies.

## Life-course health

**WHO** continued its collaboration with the Government of Egypt to protect and promote the health, safety, and well-being of the Egyptian population throughout their lifetime: from conception to old age. The prime area of work in 2017 was to support reproductive, maternal, newborn, child and adolescent health (RMNCAH) while focusing on addressing the main causes of maternal, neonatal and child mortality. In partnership with national and international stakeholders, **WHO** developed the national RMNCAH situation analysis and strategic plan (2018-2022) which will strengthen national ownership and leadership towards achieving the health-related Sustainable Development Goals (SDGs). Other life-course health activities conducted by the WHO country office during 2017 included: key activities ensuring implementation of the international code of breast milk substitutes and its proper use; updating guidelines and training modules on reproductive and family planning; and producing TV spots, together with the MoHP and UNFPA, to raise community awareness towards family planning. Other diverse actions addressed the integration of social determinants of health and gender equity in all policies, development of capacities of food sanitarians and surveillance officers to ensure food safety, and assessment of waste management in Cairo governorate.

## NCDs

Noncommunicable diseases (NCDs) remain the leading cause of death in Egypt, accounting for about 84% of all deaths in 2016. WHO supported the implementation of a nationwide survey (STEPwise survey 2016-2017), which revealed useful information regarding the prevalence of risk factors of major NCDs. Preliminary findings indicated, for instance,

that 29.5% of Egyptians suffer from high blood pressure, while 15.5% have high blood glucose levels.

Recognizing NCDs as a rapidly growing, serious health and economic burden for the country, WHO supported Egypt's efforts to address this public health problem by developing and implementing multi-sectoral national plans for NCD prevention and control. In addition to other relevant plans such as cancer control, mental health and disability health plans and tobacco control.

In key actions to address NCD risk factors and health problems, WHO supported the Ministry of Finance in raising tobacco taxes to the accepted global standards and facilitated preparatory steps for the Government of Egypt to adapt a protocol to eliminate illicit trade of tobacco products. Additionally WHO, in collaboration with the MoHP and the National Nutrition Institute, finalized the national studies on salt and fat intake in the Egyptian diet, with initial efforts to reduce salt in baladi (local) bread in three governorates. Moreover, Egypt was a pioneer country in the global WHO- ITU initiative of mHealth, where the MoHP selected to start its implementation by mDiabetes programme which incorporates digital messaging and other technological advancements to promote health care for diabetics. Given Egypt's increased priority on road safety, **WHO** supported the MoHP to conduct a national mass media campaign to raise public awareness about the importance of using safety measures to reduce road accidents and injuries.

## Communicable diseases

Despite the higher disease burden from NCDs, communicable diseases still pose a major public health threat in Egypt. Viral hepatitis is one of the most significant public health challenges with considerable disease and economic burden in Egypt. National prevalence rates for hepatitis B virus (HBV) and hepatitis C virus (HCV) among individuals from 1-59 years is 1% and 4.4%, respectively. According to recent survey results, HCV prevalence appears to have declined in the group aged 15-59 years, from 9.8% in 2008 to 7% in 2015.

With more than 1 500 000 persons living with HCV and treated from 2014

to 2017, the hepatitis C programme succeeded to transform the disease from a health system stigma to a global success story.

The **WHO** country office in Egypt collaborated with the Ministry of Health and Population in key areas to strengthen its prevention and treatment efforts of hepatitis C virus with the goal to eliminate hepatitis by 2020. Areas of support included the development of hepatitis surveillance and infection control training, and support for the provision of affordable treatments. WHO is also supporting the establishment of a national call centre to directly link community and health authorities for patient inquiries and treatment outcomes.

The Ministry of Health and Population, in line with global efforts, has identified injection safety as one of the means to reduce the spread of hepatitis C virus. Accordingly, Egypt became one of three pilot countries to implement the 2016–2018 safety injection project and to begin to develop a national policy for safety injections.

In other communicable disease areas, WHO supported the Government of Egypt in developing the national strategic plans for HIV, tuberculosis (TB) and malaria programmes. Efforts to eliminate Neglected Tropical Diseases also continued during 2017. In addition to capacity-building activities, awareness campaigns and regular support to national programmes, WHO provided for procurement of needed medications for leprosy, leishmaniasis, and filariasis programmes, as well as mass drug administration to eliminate soil transmission of helminthiasis and bilharzia.

### **Preparedness, surveillance and response to health emergencies**

The WHO country office focused on strengthening country capacities in prevention, preparedness and response capabilities, in compliance with International Health Regulations (IHR) 2005, for all types of hazards, risks and emergencies that pose a threat to human health. During 2017, **WHO** engaged in several activities in collaboration with the MoHP and other national partners and stakeholders such as academia, research institutes, and NGOs. The activities ranged from conducting assessment missions regarding the national IHR public health core capacities to capacity-building activities, such as training for the national staff and pro-



curement of needed lab equipment and supplies. The updating of the national epidemic/pandemic preparedness and response plan and standard operating procedures were also supported.

To promote disease surveillance, the WHO country office in Egypt supported the establishment of sentinel site surveillance of typhoid and paratyphoid fever and for acute infectious neurological diseases including meningitis and encephalitis several governorates. Furthermore, for the first time, a full-scale simulation exercise took place in one of Egypt's key airports, Borg Al Arab international airport in Alexandria, to build essential IHR core capacities in response to a public health emergency event.

Efforts to overcome the ongoing threat of antimicrobial resistance continued through activities that addressed various aspects: studying behavioural change to tailor antimicrobial resistance programmes, expanding the national health care-associated infections and antimicrobial resistance surveillance programme in Egypt, and supporting the Government of Egypt in initiating the antimicrobial resistance national action plan.

**WHO** has supported MoHP in its efficient efforts to sustain its polio-free country status. Toward this goal, WHO provided technical and financial support to increase public awareness and the expanded programme on immunization (EPI) staff capacity nationwide. This included strengthening the surveillance programme of acute flaccid paralysis (AFP), as well as strengthening national and regional polio laboratories.

Through the WHO pandemic influenza preparedness (PIP) framework the financial and technical support was provided to improve the influenza surveillance and response system and strengthen protection against pandemic influenza. During 2017, WHO continued to technically support national partners in areas such as outbreak investigation and rapid response of the peripheral rapid response team and preparedness assessments in almost 20 chest-speciality hospitals. Media campaigns took place during the 2017/2018 influenza season to raise awareness about influenza, methods of prevention and importance of vaccines.

Furthermore, the WHO country office in Egypt supported the National Influenza Centre (NIC) at the Central Public Health Laboratories (CPHL), most notably in the purchase of a genetic sequencer for a better understanding the nature of the virus, its geographical distribution, and source of infection.

From the start of the Syrian crisis WHO has aimed to support and provide for Syrian humanitarian needs through a programme focused on the health needs of the 126 688 registered Syrian refugees in Egypt. WHO was responsible for direct coordination of health services for Syrians in collaboration with the national health authorities and relevant partners committed to the cause of Syrian refugees' health in Egypt, including programmes such as: rehabilitation for Syrian children with mental disabilities; ensuring Syrian refugee patients' access to emergency and medical services; and comprehensive capacity-building for Syrian refugee community workers.

## UN Coordination

**WHO**, in the capacity of the WHO Representative in Egypt, participated proactively in the development of the United Nations Partner Development Framework. This participation, with continuous involvement in the UN Country Team and Security Management Team, strengthened coordination among various UN partners to support the health and non-health sectors that are engaged in improving public health programmes in Egypt. Coordination with national partners, including private sector and civil societies, was key to the success of important public health programmes such as hepatitis C prevention and control and universal health coverage through the endorsement of the Social Health Insurance law. WHO also actively supports the UN Resident Coordinator's mission in Egypt and promotes the "One UN" approach to maximize support to the Egyptian government.

## 1. Strengthening health systems for universal health coverage

Universal health coverage (UHC) – defined as ensuring that all people have access to needed health services, when and where they need them, without suffering financial hardship – is an overarching WHO principal and a priority goal for health reform. The 2030 agenda for Sustainable Development Goals (SDGs), especially target 3.8, has renewed UHC as a central piece for wider global development. To achieve universal health coverage countries require a strong, efficient, well-run health system that meets priority health needs through people-centred integrated care and a system for financing that raises enough revenue to expand coverage and redistribute the financial risk across the population.

UHC has a direct impact on the population's health. Access to quality health services enables people to be more productive and active contributors to their families and communities. It also ensures high educational attainment for school children. At the same time, financial risk protection prevents people from being pushed into poverty when they have to pay for health services out of their own pockets. UHC is thus a critical component of sustainable development and poverty reduction, and should be a key element in all governments' efforts to reduce social inequities and improve the well-being of its citizens.

Egypt has clearly set UHC as a priority objective for the health sector development. The constitution of 2014, article 18, has put Egypt on track for progressing towards UHC. This constitutional aspiration has been translated into a vision and guiding principles in the Ministry of Health and Population "White Paper" and in the health pillar of the National Sustainable Development Strategy –2030. The Social Health Insurance (SHI), law recently ratified by the parliament, will be an important instrument for larger UHC reform, as it established the legislative structure for an complete health system overhaul that fulfils the constitutional mandate.

Properly implemented, it will provide the means to ensure that everyone has access to the quality health services they need without suffering undue financial hardship from health care payments.

WHO supports the government in the development and implementation of the Social Health Insurance law under the umbrella of health system strengthening towards universal health coverage. It is providing the required technical support to the reform process through building capacity and knowledge of stakeholders from the Ministry of Health and Population and beyond, with convening expertise from the different levels of WHO. Further collaboration also included other development partners such as the World Bank, ILO, Joint Learning Network (JLN), Agence Française de Développement (AFD) and others.

Some aspects of the technical support can be summarized as follows:

- Continuing to work in close contact with the SHI committees, notably the sub-committees on governance, implementation, transitional arrangements, costing and pricing;
- Organizing knowledge and sharing experience with leading countries on the SHI system. For example, five key national staff from the Health Insurance Organization (HIO) participated over a period of three weeks in training workshops in South Korea.



These workshops were organized by the Korean National Health Insurance Services (NHIS) and Health Insurance Review and Assessment (HIRA) and were financially supported by WHO.

Another knowledge-sharing workshop is scheduled in March 2018 in Chile, to understand the Chilean health system and acquire a hands-on practical perspective;

- Convening workshops and commissioning a consultant to review the legal inter-linkages between the new SHI law and other laws such as administrative law, civil service law, etc.;
- Participating as speakers and panellists in regional and local conferences, such as participation in the eleventh Middle East Healthcare Insurance Conference in Muscat, Oman, and the CSO conference on Egypt's health care transformation.
- Supporting the Health Insurance Organization on development of the SHI implementation plan and communication strategy in collaboration with AFD.

## **Health economics and health systems financing**

Historically, Egypt has been challenged by a low public investment in health, with large out-of-pocket expenditure. However, the constitutional commitment to nearly double public health spending, from 1.5% to 3% of the GDP, along with the increased revenues assigned by the new SHI law provides a valuable opportunity to improve health systems and work towards achieving UHC.

WHO is working with the Egyptian government to find options to improve the health financing system. This entails technical support on the policy level as well as evidence generation for developing a financial coverage system based on the Egyptian social health insurance model and other mechanisms that will ensure adequate funding for health and lead to diminished out-of-pocket expenditure. Some of the recent activities during 2017 include evidence generation on specific topics, such as: costing of health services, disease-specific national health accounts, catastrophic expenditure assessment and health financing system review.

## Costing study and related capacity-building for the social health insurance reform in Egypt

WHO in collaboration with the Ministry of Health and Population, the Health Insurance Organization (HIO), the Supreme University Council, and the private sector has recently completed a costing study on secondary and tertiary care hospitals. Throughout the study, the WHO team in collaboration with international consultants from the Joint Learning Network (JLN) costing collaborative provided technical training and capacity-building to develop a force of Egyptian experts who can further update and expand costing work. The final results of the study, which began in May 2016, were released in April 2017.



The study provided considerably accurate indicative cost information on health services costs that can be used as a basis to inform decision makers on pricing policies and provider payment system development. This costing exercise is considered a foundational step to provide indicative benchmarks to inform price setting and provider payment systems for the future SHI. In addition, it served as an important reference for the institutionalization of costing work to enable planning, payment and management functions needed for policy makers and decision makers in the health sector. In this regard, WHO remains mandated to provide technical support to this process and possibly be engaged in a new phase of costing work that might include a larger sample of secondary and tertiary hospitals in addition to PHC services.

## Assessment of financial risk protection in health spending in Egypt:

WHO is working to complete an assessment of financial risk protection in health in Egypt.

The main objective of this work is to strengthen the capacity of the national experts in analysing financial protection in health spending.

This includes reviewing the conceptual underpinnings

behind financial protection and presenting the new methodology for the analysis of the SDG indicator 3.8.2 of catastrophic health expenditure, as well as other indicators such as impoverishment due to health spending. Outcomes from this work will be followed by a further country consultation process in order to update the country profile on the relevant SDG indicators. Further outcomes will provide additional evidence particularly for the implementation process of the new social health insurance reform scheduled to roll out in 2018.



## National health accounts with disease specific expenditures

WHO support to health financing includes analytical work on national health accounts. WHO, in collaboration with the sector of strategic planning at MoHP, produced a preliminary update of health accounts with a focus on disease-specific health expenditures. Health accounts provide policy-relevant evidence concerning the consumption and financing of health care goods and services. This is considered an important part of evidence production for SHI, which the Egyptian government is currently developing. It supports the design of the SHI and its implementation

by allowing policy makers to take well-informed decisions on issues such as current funding gaps, inequities and inefficiencies. It also supports the monitoring and evaluation of the SHI roll-out as it will give information on the impact of SHI on key health expenditure indicators.

## **Integrated service delivery**

### **Family practice training programme and professional diploma for general practitioners**

Egypt's family health model (FHM) was established in 1999 as one of Egypt's health sector reform programme strategies for providing good quality integrated primary health care services to the entire population, addressing the whole family. In the meantime, the new social health insurance law explicitly indicates the family health model as the first level of service provided to the population and defines the family physician as the physician who has received specialized professional training in family medicine.

Ensuring a sufficient, well-educated, trained, adequately paid and motivated health team to work in family health facilities was one of the major challenges identified through the assessment of the FHM conducted in 2014 by the Ministry of Health and Population (MoHP) in collaboration with WHO. Furthermore, assessment of training streams to prepare general practitioners (GPs) for practicing in family health facilities completed in 2016 concluded that current pre-service and in-service training programmes for GPs is far from adequate to guarantee provision of high quality services by these practitioners.

Therefore, WHO in collaboration with relevant stakeholders worked on establishing and piloting a 6-month certified training programme for GPs to provide quality family health services in family health units and centres through the family health model which is Egypt's norm for providing integrated PHC service and the first level of care provided through the new social health insurance system. This programme uses a mix of theoretical, practical and online training modalities and aims to be institutionalized and acknowledged by MoHP and universities as a programme that is sufficiently qualifying for practice in family health



facilities. It is implemented in selected governorates as a pilot before being rolled out across Egypt in phases. The online component, which uses the Moodle® open source training platform, was provided to selected candidates enrolled in the programme. The practical part is done in family health units and centres belonging to MoHP under supervision of the MoHP and faculty members from universities in selected governorates.

The project is considered as the first phase of a larger plan to implement a professional diploma in family practice through collaboration with the Supreme Council of Universities, and development of an online training programme for credentialing all new graduates with a license to practice medicine through collaboration with the Egyptian Organization for Physicians' Training.

Further support to the family health model includes training of trainers (ToT) of the Ministry's PHC and Information Centre staff on using Moodle as a platform to establish a family health training programme. Additionally, WHO support technical trainings and capacity-building activities on preventive services in dentistry for MoHP dentists and dental assistants as well as other capacity-building activities to the nursing sector.

### **Development of certified online patient safety course**

WHO supports the country to strengthen its patient safety measures and institutionalization by ensuring a patient safety programme through the introduction of a workplace safety culture, leadership and patient engagement, reporting and analysis of adverse events and adoption of safe practices.

In this area, WHO launched an online professional postgraduate patient safety course with English and Arabic content to be hosted on a website of an academic institution such as Alexandria University or the WHO in Egypt website. This work was implemented by WHO in collaboration with the Medical Research Institute in Alexandria University and the Alexandria Patient Safety Alliance (APSA). Technical support as well as financial support was provided from WHO to cover the cost of this implementation.

This project aimed at implementing educational programmes dedicated to patient safety as a means for making health care providers more knowledgeable and more capable in adopting safe practices. These educational programmes should be easily accessible for practicing health care professionals to ensure early exposure. It also aimed at understanding and creating a culture of patient safety orientation by future health care professionals.

## **Implementation of admission, discharge and transfer (ADT) information system**

Hospital discharge and outpatient data are one of the richest and most valuable sources of health-related information. An admission, discharge, and transfer (ADT) system records basic demographic data (including date of birth and sex) for each discharged patient, as well as admission and discharge dates, discharge diagnosis, and discharge status.

An ADT system is essential to derive useful information related to utilization, disease patterns and mortality.

The implementation of an ADT system was completed at 128 general and specialized hospitals in two phases. WHO supports the Ministry of Health and population to apply an automated Admission, Discharge, and Transfer means in further 50 hospitals as a third phase of the programme. This work also aims at strengthening the capacity of physicians in selected hospitals on proper diagnosis using ICD10 coding and rules.

## **Health information system (second phase of establishing the data warehouse in MoHP)**

The National Information Centre for Health and Population (NICHP) housed within the Ministry of Health and Population (MoHP) is the designated collector and supplier of health data in Egypt. NICHP collects service and utilization data that are manually aggregated at the facility and transmitted to district, governorate, and national levels. Some hospitals report inpatient-specific discharge data to governorate and then to national levels. Experienced observers report that datasets

provided by the facility, district, governorate, and national levels may be inconsistent.

An assessment of the Egyptian health information system (HIS) was commissioned by WHO in September 2014 to identify the areas to strengthen in the HIS to support overall health sector development. Between September and November, one national and one international consultant worked with the Ministry of Health (MOH), its National Information Centre for Health and Population (NICHP), and other partners to review key issues related to HIS development in Egypt. Based on the cooperation between WHO and MoHP, an agreement was reached on building a data warehouse based on existing NICHP data. The following main areas of work towards establishing the data warehouse were outlined and implemented: a) master facility list (MFL); b) indicators and data definitions; c) information and communications technology (ICT) requirements; and d) user documentation and training. Also, WHO supported the capacity-building of NICHP staff on the application of an IRIS tool to improve validation of cause of death reporting and to conduct a policy dialogue with the concerned sectors in the MoHP, and to establish a multi-disciplinary taskforce to complete the work.

### **Access to essential medicines and health technologies**

Target 3.8 of the SDGs states “access to safe, effective, quality and affordable essential medicines and vaccines for all”. Accordingly, WHO supports missions for assessment of regulatory authorities of medicines, vaccines and training on good manufacturing practice (GMP). WHO successfully provided training on GMP, in collaboration with WHO headquarters, to raise the capacity of national regulatory authorities. Regulatory inspection, including GMP, is one of the WHO recommended regulatory functions in medical products producing countries in which Egypt is one of the leading countries in the Eastern Mediterranean Region.

This work aimed to establish competent national regulatory authorities that have the responsibility to ensure that all medical products including medicines, vaccines and medical devices, used in the country as well as exported, are of assured quality by addressing the famous triangle of quality, safety and efficacy (QSE).

## Social protection floor initiative (SPF-I)

WHO is actively participating and chairing the health component of the social protection floor initiative (SPF-I) in Egypt. SPF-I is a UN joint work to build global coalition of national and international partners to support countries towards national social protection floors for their population. It is nationally defined as sets of basic social security guarantees aimed at alleviating poverty, vulnerability and social exclusion. These guarantees should ensure at a minimum that, over the life cycle, all who are in need have access to essential health care and basic income security.

WHO is chairing the health working group and drafted recommendations and scenarios to be included in the larger SPF framework. These recommendations, alongside other recommendations from different working groups, will likely be subject to a costing exercise that estimates the amount of resources needed to be scaled up in order to extend the social protection floor. WHO is planning to actively participate in further steps to expand social protection in collaboration with the Ministry of Social Solidarity (MoSS), the International Labour Organization, UNICEF and other national and international counterparts. In addition, WHO is continuing to co-chair, together with the MoHP, the Health Development Partners group and playing its role in framing, chairing and coordinating with national and development partners the health and population pillar of the United Nations Partnership for Development Framework (UNPDF). In this context, the WHO country office in Egypt organized an informal meeting with a Health Development Partners group in January 2017, with the participation of UNAIDS, UNHRC, UNICEF, Médecins du Monde (MDM), USAID, Médecins Sans Frontiers (MSF), USAID and the UN Country TeamCT. Moreover, WHO supported the development of the Country Cooperation Strategy (CCS) roadmap with the MoHP. It commissioned a consultancy and held a first stakeholders' orientation meeting to support the first phase of the project.

## 2. Promoting health across the life-course

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Health of all people is fundamental to the attainment of peace and security and is dependent on the fullest cooperation of individuals and states and the ability of a state to promote and protect the health of its citizens. Accordingly, WHO continues its collaboration with the Government of Egypt to protect and promote the health, safety, and wellbeing of the Egyptian population throughout their lifetime: from conception to old age. Diverse population health needs are addressed by focusing on the reproductive, maternal, newborn, child and adolescent health as strategic priorities.

### **Reproductive, maternal, newborn, child and adolescent health (RMNCA)**

The prime target of WHO under this area of work in 2017 was to support reproductive, maternal, newborn, child and adolescent health (RMNCAH) while focusing on addressing the main causes of maternal, neonatal and child deaths, while maintaining the quality of care all over Egypt. Accordingly, in collaboration with UNICEF and UNFPA and in cooperation with different national counterparts and stakeholders, WHO has developed the national RMNCAH situation analysis and strategic plan (2018 -2022), with the aim of strengthening national ownership and leadership towards achieving the SDGs.

The RMNCAH situation analysis and strategic plan has been reviewed by the WHO Country office in Egypt in collaboration with the Regional Office, and UNICEF, UNFPA and national experts who have collectively set forth a number of major objectives:

- To evaluate the implementation of different programmes and their plans and to determine lessons learned and acknowledge good practices.

To identify opportunities, lessons and threats, as well as finding practical and realistic solutions for problems and gaps.

To align the programme's priorities and guidelines with Sustainable Development Goals (SDGs) and the global strategy for women, children and adolescent health.

To produce a set of recommendations based on actions, resources and responsibilities needed in order to ensure a good implementation and operationalization of the strategic plan.

To decide the next steps for implementing the recommendations including the inputs of the operational RMNCAH plan.

## **Maternal health activities**

Maternal health refers to the health of women during pregnancy, child birth and postpartum period. While motherhood is often a positive and fulfilling experience, for many women it is associated with suffering, ill-health and even death. The major direct causes and challenges that WHO faces in maternal morbidity and mortality includes: haemorrhage, infection, high blood pressure, unsafe abortion and obstructed labour.

The results of the review of maternal health activities will be reflected in the RMNCAH national strategy. Egypt has made significant reductions in maternal and child mortality since 1990, as shown by the latest monitoring data for the Millennium Development Goal 4. One of its aims continues to be to strengthen the capacity of health workers in order to reduce morbidity and mortality among women, children and adolescents.

WHO/Egypt in collaboration with the Regional Office has supported the Ministry of Health and Population to implement the International Code of Marketing of Breast Milk Substitutes, a set of recommendations to regulate the marketing of breast-milk substitutes, feeding bottles and teats. The code aims to promote nutrition for infants by the protection and promotion of breastfeeding and ensure the proper use of breast-milk substitutes when necessary.

## Child health activities

Malnutrition likely contributes to a third of all under-five deaths in low-income countries. For the children who survive, malnutrition adversely affects their growth and cognitive development if left untreated during the period from the earliest month of life to their second birthday. WHO organized several activities in different governorates to build capacity of 24 physicians from Al-Azhar University on how to implement the Integrated Management of Childhood Illness (IMCI). IMCI is an integrated approach of both preventive and curative elements to child health that focuses on children's well-being; it aims to reduce death, illness and disability and to promote improved growth and development among children under five years of age. WHO also supported the capacity-building of 60 IMCI staff on district planning in Behira, Suez and Luxor governorates and the capacity of 120 physicians in the Ministry of Health and Population on IMCI case management skills in Alexandria, Suez and Behira governorates.

Additionally, a pre-service IMCI teaching assessment workshop was organized by WHO for 24 physicians from the Faculty of Medicine in Alexandria. The participants were given a quick assessment of IMCI teaching as a protocol for paediatrics and outpatient services to understand areas to be improved. Also 48 medical staff in Al-Azhar and Alexandria universities received an in-depth orientation on IMCI case management. This was followed by a facilitator course and two follow-up visits for ten teaching staff from Al-Azhar University.

## Adolescent health activities

Adolescents and young people between ages 10–19 years are often thought of as a healthy group. Nevertheless, many adolescents die prematurely due to accidental injuries, suicide, violence, pregnancy-related complications and other illnesses that are either preventable or treatable, and some suffer chronic ill-health and disability. In addition, many serious diseases in adulthood have their roots in adolescence.

WHO supported adolescent health-related services by strengthening technical capacities of 45 physicians and 45 nurses working in adoles-

cent health clinics in Alexandria. To ensure good service provision periodic evaluation was undertaken of the activities and health services provided to young people in Cairo, Alexandria, Asyut and Sohag governorates. Moreover, 96 physicians and 96 nursing staff received capacity development training in Cairo governorate, and a group of 64 physicians and 32 nurses were trained on the needed soft skills allowing them to communicate with the target groups in the selected health centres and to give them the technical information. Supervisory teams at governorates and health directorates are also involved to provide technical support for PHC service providers through on job training and supervision.

### **Reproductive health and family planning**

WHO in collaboration with UNFPA and the Ministry of Health and Population produced TV spots on family planning services as part of a communication strategy to raise awareness in order to control and reduce the increasing birth rates in Egypt. WHO strengthened the health promotion of reproductive health in Upper Egypt through the following activities:

- updated guidelines and training modules on reproductive and family health;
- developed capacities of health workers in Qena and Luxor on prevention of unsafe abortion, gynaecological cancer and harmful female genital mutilation; and
- conducted an orientation workshop for directors of health facilities and NGO's on female genital mutilation hazards and legislation.

### **Social determinants of health and gender**

The social determinants of health are the conditions in which people are born, grow, live, work and age, including the health system. Gender considerations require the provision of health policy, programmes, services and delivery models responsive to the diverse needs of humans equally. From this aspect and in continuing response and support for the Rio Political Declaration on Social Determinants of Health of 21 October 2011, WHO continues to work for effective integration of social determinants of health and gender within health programmes and capacity-building to



implement health in all policies, intersectoral action and social participation.

## **Environmental health**

WHO in collaboration with the Regional Centre for Environmental Health Action (CEHA) cooperated with the Egyptian government to implement programmes and activities pertinent to environmental health to upgrade the institutional capacity of national partners the management of health care waste. In addition, in response to the request of the Cairo governorate, WHO supported the implementation of a waste management assessment mission.

## **Food safety**

WHO supported developing the capacity of 180 food sanitarians and surveillance officers on laws, decrees, and decisions regulating food control and control systems for imported, exported and domestic food, as well as report writing and planning of inspection visits, and the inspection technical style of food establishments in six governorates: Aswan, Luxor, New Valley, Marsa Matrouh, South Sinai and Red Sea. In addition, WHO organized trainings to enhance the national capacities of food safety monitoring mechanisms and violation detection and legal procedures to be followed.

WHO launched new guidelines in November 2017 on the use of medically important antimicrobials in food-producing animals. It recommended that farmers and the food industry stop using antibiotics routinely to promote growth and prevent disease in healthy animals. These guidelines aim to help preserve the effectiveness of antibiotics that are important for human medicine by reducing their use in animals.

## Research development and innovation

The ultimate aim of research development and innovation is to brief health and policy makers to support research development and innovation in Egypt. Believing in its importance, WHO continues its support in the following activities:

- institutional capacity-building
- institutional research careers
- ethics and research for all health workers and professionals
- intersectoral collaborative and joint work with different partners
- databases for research

### 3. Noncommunicable diseases

In Egypt, 84% of all deaths are due primarily to NCDs; the leading causes are cardiovascular diseases (46%), cancer (14%), chronic respiratory diseases (4%), diabetes (1%), and other NCDs (19%).

Understanding the high prevalence of all NCD behavioural risk factors makes the problem more challenging. The STEPwise survey 2016–17 revealed that: 22.7 % of adult Egyptians aged 15–69 years are current tobacco smokers; the majority (90%) of the adult population eat less than five servings of fruits and/or vegetables a day; the mean intake of 9 grams of salt per day is almost double the WHO recommended level (less than 5 grams of salt daily); and 25% of the population are insufficiently physically active.

Moreover, there is a high prevalence of biological risk factors – expected as a result of the unhealthy lifestyle followed by most of the population. The survey indicated that 29.5% are suffering from high blood pressure, 35.7% are obese, 15.5% have raised blood glucose levels and about 19% suffer from raised cholesterol levels.

In recognition of the serious national implications of the rapidly growing burden of non-communicable diseases on both health and the economy of Egyptians, the Ministry of Health and Population, in collaboration with WHO took urgent actions to address this high priority public health problem, through strengthening and promotion of NCD prevention and control together with establishment of a robust surveillance system to monitor NCDs, their risk factors and the effectiveness of implemented interventions.

## NCD activities in Egypt

To address the NCD problem using a more comprehensive and integrated approach, WHO broadened its partnership and collaboration with multiple sectors in the government. In addition to the Ministry of Health and Population, the main partner, WHO collaborated with the Ministry of Communication and Information Technology, Ministry of Internal Trade and Supply, Ministry of Finance, Ministry of Youth and Sport, the Ministry of Education, Ministry of Higher Education and Central Agency for Public Mobilization and Statistics.

Among the most important activities, the following were achieved:



- WHO supported the MoHP to develop and finalize NCD national multisectoral action plan.

This action plan was based on a previously conducted situation analysis report on current situation of NCD in the country. The unique feature in this plan was the involvement and integration of all concerned governmental sectors in its development to ensure their commitment in implementing a wide range of activities that tackle the various NCD risk factors.

- WHO shared with the National Cancer Committee in the development of the national cancer prevention and control strate-

gy, which was released by the Minister of Health and Population. The huge disease burden posed by cancer morbidity and mortality, and the economic cost for the national health system, prompted work on developing this strategy.

- WHO, in collaboration with the MoHP, developed NCD guidelines on early detection and treatment of hypertension, diabetes and cancer. Diabetes national guidelines were printed and distributed, and were converted into a software application for installation on android mobile phones to support health care providers in early detection, diagnosis, and management of diabetes and pre-diabetes.
- The NCD unit at the MoHP with the support of WHO expanded the establishment of the NCD surveillance system to more primary health care centres and their referral hospitals in Cairo, Giza, Alexandria and Menoufia in 2017. The objective is sustain monitoring NCD prevalence and their risk factors in the selected governorates through the sentinel centres and to evaluate the ongoing governmental interventions. To build capacities, WHO in collaboration with the MoHP's NCD unit has conducted a series of training courses on NCD surveillance for the assigned technical staff in 14 PHCs in seven governorates: Cairo, Giza, Suez, Ismailia, Bani suef, Qena, and Fayoum. In addition, WHO has provided support to monitor and evaluate the data collection and reporting process which needs to be revisited and monitored to overcome the obstacles faced by MoHP staff during the registration of identified cases in some centres.



- In collaboration with the MoHP and the Central Agency for Public Mobilization and Statistics (CAPMAS), the WHO country office in Egypt supported the implementation of the STEPwise survey 2016-2017. The CAPMAS was responsible for Step 1 implementation while the MoHP was responsible for the implementation of Step 2 and Step 3. WHO provided all technical and financial support necessary for all phases of the survey's implementation. The survey results and final report are scheduled for release in early 2018.



- WHO continued its technical and financial support to the MoHP to expand the implementation of mHealth, the UN global initiative which harnesses mobile technology to fight NCDs and work in other health areas. In this context, MoHP and the Ministry of Communication and Information Technology (MCIT) collaborated with WHO to implement a campaign on mDiabetes programme by sending health messages via SMS for three consecutive months, starting in June 2017, to a selected sample of diabetes patients in Egypt. The main objective was to raise patients' awareness about their disease and help them to manage their morbid condition and prevent complications by following a healthy life style.

- Currently the MoHP is finalizing a report on mDiabetes Monitoring and Evaluation based on telephone interviews using a well-developed questionnaire in addition to lab analysis for glycated haemoglobin (HbA1c), before and after, as two assessment tools, to show the impact of the programme on controlling the blood glucose level among the targeted population. Based on its results and recommendations, the next phase of mDiabetes will be planned and implemented.
- A new mHealth programme, mTB-Tobacco, was initiated to support tuberculosis patients to quit smoking which is expected to enhance treatment outcome among patients . Egypt is a pioneer country in its implementation worldwide; it is currently in the pilot phase and results will be released soon.
- The MoHP in collaboration with WHO has developed a multi-sectoral national committee to reduce salt intake by 30% by 2025 in order to achieve one of the main targets of the NCD global action plan and monitoring framework. This committee, which has the authority to strategize and monitor the implementation of salt reduction activities, has decided to proceed with a 20% reduction as a first step after conducting palatability tests with different target groups from the community. Accordingly, a series of TOT and training workshops were conducted for the mill owners and workers on the procedure of salt reduction in baking baladi bread in Cairo, Giza, and Qalyubiya. Unfortunately, the initiative has been stopped due to the lack of a proper communication and coordination mechanism between concerned stakeholders in the Ministry of Supply and the Ministry of Health and Population for its continuance due to the change of the Minister of Supply, who was the initiative champion.
- To achieve the NCD global target of eliminating industrially produced trans-fat and other harmful fats in the food supply of Egyptians, WHO supported by the National Nutrition Institute (NNI/MOHP) to finalize the national study conducted by the National Nutrition In-

stitute to assess the amount and type (profile) of fat in the Egyptian diet and identify the fat and the fatty acid content of the most commonly used fats in the Egyptian diet. It is important to note that coordination between the two national partners did not continue due to the same previously mentioned reason for The salt reduction initiative.

- Tobacco control is a major challenge in Egypt with 22.8 % of adult Egyptians using tobacco products and almost 50% exposed to second-hand smoke in their own homes. With tobacco as a main factor in the rising epidemic of NCDs – such as chronic lung disease, lung cancer, ischaemic heart disease and stroke – Egypt continues to support the implementation of effective tobacco control interventions in line with practices and evidence-based policies as outlined in the Framework Convention for Tobacco Control (FCTC). WHO has conducted two missions to support Egypt in sustaining its efforts to increase the tobacco taxes and adjust the current tax system to be in line with the WHO recommended global system. Currently and after much collaborative work, taxes on cigarettes exceed 70% of the retail price. WHO considers this step as one of the most successful in tobacco control in Egypt.



WHO in collaboration with MoHP and the Cairo Association against Smoking, Tuberculosis and Lung Diseases (CASTLE) finalized the implementation of a unique national



- study to assess the illicit tobacco trade in Egypt in 2016–2017 and compare its results with that of the previous study conducted in 2012–2013. The study results were released at a December 2017 press conference.
- In other efforts, WHO called for the development of a national multisectoral committee to study and discuss the WHO protocol to eliminate illicit tobacco trade. After 1.5 year of meetings and workshops, the committee reached consensus and developed a comprehensive report on their final conclusion regarding the importance of urgent signing of the protocol, and became one of the pioneer countries in this regard. The committee submitted the report to the cabinet for discussion and a final decision in this regard.
- One of the most prominent signs of tobacco control success in the country, worth highlighting, is that Egypt was one of 15 countries at global level, and one of the two countries in the Eastern Mediterranean region that was selected as a party in the global project of FCTC 2030 to strengthen the implementation of the FCTC. The project strategy has been developed and integrated within the national tobacco control plan to start its implementation in 2018.

## **Mental health**

Mental well-being, an integral part of health, is a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community. Mental well-being provides the substrate for positive emotions, thoughts, perceptions, cognitions, communications and behaviours. Mental well-being is therefore not only desirable in itself but is also a resource for the generation, protection and accumulation of human, physical, natural and social capital. It is determined by a complex and diverse interaction of biological, social, psychological and structural determinants of health, which confer differential resilience or vulnerabilities to develop disorders and disabilities. The regional strategy on mental health recognizes the importance of in-

tersectoral, coordinated action to promote mental health and prevent mental disorders, and provides a template for action across the range of sectors to realize this.

Mental health has been a main priority area on the health agenda of the Ministry of Health and Population since 2014. Strong, informed community leaders are required to achieve its goal.

In order to fill the huge gap between the needed mental services and the currently available ones and to render the mental health services geographically and economically accessible to their recipients aiming to facilitate inclusion and participation of people within the community, WHO has supported MOHP represented in the General Secretariat of Mental Health (GSMH) to conduct mental health survey at the national level. The survey objective was to identify the main mental disorders in the Egyptian community, their prevalence and epidemiological distribution. Based on the survey results the MOHP will develop evidence based mental health future plans and policies in line with global standards. Results will be released early in 2018 under the auspices of HE Minister of Health.

Also, a leadership course in mental health has been organized by WHO in Egypt in collaboration with the Regional Office of the Eastern Mediterranean and the American University in Cairo. The course aimed to improve the capacity of the key players in mental health service development in the General Secretariat for Mental Health and the MoHP to enable them to scale up mental health services in Egypt. The first round of the course in 2014-2015 was accomplished successfully. A second round was conducted in 2016 with similar success; it included participation by six candidates nominated by the General Secretariat. In addition, a national mental health action plan has been developed to enable stakeholders and decision makers to have a concrete guide for mental health planning for the near future.

## Injuries and violence

Emergency care systems address a wide-range of medical, surgical and obstetric conditions including medical emergencies, injuries, burns, intensive care units, complications of pregnancy, and exacerbations of noncommunicable diseases (heart attacks, strokes and the like), poisoning, etc. Emergency care covers a range of services – from care at the scene and transport, through emergency unit care, to early operative and critical care inside a fixed facility – that are coordinated by legislative and governance frameworks.

Three levels of WHO – WHO in Egypt, the Regional Office of the Eastern Mediterranean, and WHO headquarters – collaborated to support the MoHP's emergency care sector to conduct a consensus-planning workshop on Emergency Care Service Assessment (ECSA) in 2017. The meeting included respondents to the online ECSA questionnaire developed by WHO Emergency Care System Assessment (ECSA) to gather information about the national emergency care system from a wide range of concerned national experts. The workshop identified the gaps and reached consensus on action priorities for an implementation plan to inform policy-makers, health system administrators, health care providers and other stakeholders. Results were recorded in a final country report to be used for future planning to enhance and strengthen the emergency care service in the country.

## Road safety:

Egypt joined the global decade for road safety action 2011–2020, launching its own national plan in 2011–2012. After initial achievements in the country, most activities stopped following the 2011 revolution and the halt in funds. Recently the Minister of Health and Population requested WHO to collaborate with the MoHP to revive the road safety national action plan, using a health perspective to raise public awareness to the importance of safety measures and traffic rule compliance for protection on the roads.

In response, WHO, in collaboration with the Ministry of Health and Population, the Ministry of Interior and the Ministry of Transportation, began

the planning and organization of a major road safety awareness campaign, through all mass media channels at the national level. A variety of communication channels were used to target the public: TV, radio, newspapers, social media, billboards and others means.



WHO also continued its support to the capacity-building of the nationals, and to establish a unified standard database on road traffic incidents, and to conduct an assessment of the current road traffic injuries surveillance system to identify its gaps and strengths and plan accordingly to scale up. The WHO Regional Office, in coordination and support of WHO in Egypt, encouraged the implementation of a national study to identify and estimate the economic cost of road traffic injuries.

The results will provide stakeholders and decision-makers with information about another aspect of the burden caused by road injuries – the economic burden. This will enable them to make well-informed decisions for all needed measures to save lives and prevent injuries and deaths on the road.

As a WHO Eastern Mediterranean Region Member State, Egypt has finalized the process of the fourth Global Status Report on Road Safety (GSRRS) data collection, validation and shared it officially with WHO following a government review.

## 4. Communicable diseases

### Viral hepatitis

Viral hepatitis globally is responsible of an estimated 1.34 million deaths per year from acute infection and liver cancer and cirrhosis; approximately half of the deaths are due to hepatitis C (HCV) and hepatitis B (HBV), and 5% are due to hepatitis A (HAV) and hepatitis (HEV). In 2015, an estimated 257 million people were living with chronic HBV infection globally, and 71 million people with chronic HCV infection.

Viral hepatitis is one of Egypt's most significant public health challenges. People living with viral hepatitis have an increased risk of cirrhosis and liver cancer and although not all people infected with viral hepatitis develop these conditions, the medical and economic burden incurred by those that do is significant.

According to the results of the government's most recent Egypt Demographic Health Survey (E-DHS) in 2015, a national prevalence rate for hepatitis B virus among individuals in the –59 years is 1% and for hepatitis C virus among the same group age is 4.4%. According to recent survey results, HCV prevalence appears to have declined in the group aged 15–59 years from an estimated 9.8% in the 2008 survey to 7% in 2015.

WHO estimates that approximately 1.96% of all Egyptians have an active hepatitis B infection and 6.3% are living with HCV. WHO supports the provision of treatment at an affordable price in 2014, this made treatment available at 1% of the cost that it was sold for in the US. In addition, the WHO country office Egypt supports the Ministry of Health and Population through the development and implementation of hepatitis surveillance, infection control training, and raising awareness of hepatitis C.

WHO considers Egypt, where more than 1 500 000 persons living with HCV have been treated from 2014 to 2017, to be a model for treatment efforts, as the Egyptian government, in collaboration with WHO and the different stakeholders, has scaled HCV treatment in order to control and eliminate viral hepatitis infections.

WHO in collaboration with the Ministry of Health and Population and the World Bank commemorated World Hepatitis Day 2017 by illuminating significant landmarks in Cairo – such as the Giza pyramids, Cairo Tower, and the Ministry of Foreign Affairs – in green light.

This initiative aims to build national momentum and raise public awareness of hepatitis prevention and treatment and sets an ambitious goal for Egypt to eliminate hepatitis by 2030



In addition, WHO launched a social media campaign including awareness materials in the Arabic language.

**WHO** supported the participation of high level delegations from Ministry of Health and Population in the World Hepatitis Summit attended by stakeholders world-wide. It was an important opportunity for Egyptian national representatives to interact with counterparts for mutual exchange of experience and ideas.



The theme of the World Hepatitis Summit was “Implementing the Global Health Sector Strategy on Viral Hepatitis: towards the elimination of hepatitis as a public health threat”.

WHO collaborated with the Burnet Institute in Australia to support a study tour for five national officers from the Ministry of Health and Population in different sectors. The study tour was an opportunity to develop the capacity of Egyptian health workers and exchange Australian–Egyptian experience regarding treatment in the primary health care centres across the country.

Furthermore, WHO is supporting the establishment of a national call centre that aims to receive the patient inquiries and link them to treatment centres as well as follow up the treatment outcome for patients who received direct-acting antivirals (DAAs) for the treatment of hepatitis C infection. The call centre can also be used for other activities that require direct communication between the community and health authorities.

WHO in collaboration with MoHP and more than 70 stakeholders launched a digital portal for coordination of the ongoing and planned activities related to HCV elimination.

## Injection safety

In medical terms, an injection is the introduction of a drug, vaccine, contraceptive or other therapeutic agent into the body using a needle or syringe. Injections are among the most common health care procedures throughout the world, with at least 16 billion injections administered annually worldwide.

The use of sterile equipment for all injections is essential, and it is of vital importance that injections are carried out safely in a way that does not harm the patient or expose health care workers to unnecessary risk as



a result of contact with contaminated needles or syringes.

The vast majority of injections – around 90% – are given in therapeutic care. Immunization injections account for around 5% of all injections, with the remaining covering other indications, including transfusion of blood and blood products, intravenous administration of drugs and fluids and the administration of injectable contraceptives. The risks of unsafe injections include: transmission of bloodborne pathogens such as hepatitis B and C and HIV to patients through the reuse of syringes and accidental needle-stick injuries of health care workers. Reusing syringes for multidose medication and using containers for several patients can also lead to the spread of viruses, bacteria and other pathogens. In Egypt the Ministry of Health and Population has identified injection safety as one of the means to reduce the spread of hepatitis C virus.

Egypt is one of three countries chosen to pilot implementation of the 2016–2018 Safety Injection project as injection safety is a main priority for the Ministry of Health and Population. To this end, the MoHP and WHO conducted a national assessment survey in two health districts in each governorate of eight randomly selected governorates based on population proportion, to determine the magnitude of the injection safety problem in governmental and private health care facilities, identify the gaps in Injection practice, and recognize relevant monitoring and evaluation tools for improving Injection safety in Egypt. In addition, WHO trained a team from MoHP and academia on injection safety practices in order to assess practices in 32 governmental hospitals, 15 private hospitals, 48 primary health care centres, 48 community street pharmacies, and 2257 households.

WHO supported the development of an Injection Safety national policy to be endorsed by MoHP to implement injection safety procedures. It also conducted a training programme for 69 participants on injection safety practices and organized two workshops for medical students of the International Federation of Medical Students' Associations on the injection safety protocol.



In an unprecedented step towards maintaining injection safety, WHO awarded an Egyptian manufacturer of locally-produced syringes a certificate of Performance Quality and Safety (PQS) for production of three different sizes of hypodermic syringes with a reuse-prevention feature.

WHO prequalification aims to ensure that diagnostics, medicines, vaccines and immunization-related equipment and devices for high burden diseases meet global standards of quality, safety and efficacy in order to optimize use of health resources and improve health outcomes. The prequalification process consists of a transparent, scientifically sound assessment, which includes dossier review, consistency testing or performance evaluation and site visits to manufacturers. This information, in conjunction with other procurement criteria, is used by UN and other procurement agencies to make purchasing decisions regarding diagnostics, medicines, and/or vaccines.

WHO considers that the manufacture of hypodermic syringes with a reuse-prevention feature is an important step towards safe injection for patients in Egypt and would encourage other local manufacturers to start investing in quality standards to meet WHO PQS standards.

## **HIV/AIDs, tuberculosis and malaria**

Most epidemics are concentrated in at-risk populations. The HIV epidemic is still on the rise in Egypt, with strong evidence of concentration among people who inject drugs and men who have sex with men. Accordingly, Egypt launched its new national strategic plan addressing HIV and AIDS (2015–2020), aiming at the prevention and treatment of the diseases. The plan is set to achieve the global goal of eliminating HIV/AIDS by 2030, as part of SDGs. The National Strategic Plan focuses on addressing stigma and discrimination. WHO collaborates with different stakeholders and

partners to support the National AIDS Programme (NAP) in a number of ways. In collaboration with the MoHP, WHO conducted a clinical management training on antiretroviral therapy (ART) and case management for physicians working at the 13 HIV clinics in different governorates, to build their capacity and update their clinical knowledge and skills on the national treatment guidelines in line with the WHO guidelines.

In addition, WHO joined the efforts to commemorate World AIDS Day in December 2017 by organizing HIV prevention awareness campaigns nationwide.



WHO participated in an advocacy meeting at the Ministry of Foreign Affairs with several stakeholders to engage partners in supporting activities towards HIV elimination. WHO also supported the creation of a Health Information Management System (HIMS) to link ART centres with the National AIDS Programme in order to build a single platform with all needed information about treatment, drug inventory, and early warning indicators.

WHO has supported the Egyptian government in developing the national strategic plans for the HIV/AIDS and TB programmes. WHO supported the procurement of urgently needed ART and lab kits to the MoHP to address a supply shortage at the end of 2017.

In addition, WHO supported the procurement of urgently needed anti-TB drugs which the national TB programme faced challenges in obtaining. In collaboration with WHO headquarters, a mission was conducted in Egypt to provide assistance to the national TB control programme to develop a plan for the new TB paediatric formulations 22–30 January 2017. Simple, child-friendly medicines for drug-sensitive TB are now available in fixed-dose combinations (FDCs) containing the correct doses of multiple drugs corresponding to WHO treatment guidelines. The medicines are not new but they are improved dosage forms that are simpler and easier for children to take and designed to dissolve in water in a few seconds. Fixed-dose combinations allow easier consumption for children and do not need to be split or crushed.

A briefing session on childhood TB was held to discuss with national experts and different stakeholders the future transition plan of Egypt. Field visits followed to a chest-specialty hospital and TB managing centres (TBMU) to observe the patient flow from screening at the paediatric outpatient department to the infectious disease department and TB ward where patients are registered and treated. The number of children aged 0–14 years with reported cases of TB was 619 in 2015 and 500 in 2016. There are shortages in TB paediatric medicines in Egypt, and children are treated with whatever is available from the local medicines or receive donated medicines. The mission met with members of the Central Administration for Pharmaceutical Affairs (CAPA) and other stakeholders to identify strengths and weaknesses in different areas of the national supply chain.

With regards to the national malaria programme, the WHO country office in Egypt is continuously securing procurement of all antimalarial drugs required by the MoHP, and providing technical assistance to the national focal points, including updating them with WHO position papers and guidelines. Currently, WHO is in the process of providing the necessary technical support for verification of malaria elimination so that Egypt can be certified as a malaria-free country.

### Neglected tropical diseases



all primary schools, targeting 13.5 million students in 27 governorates all over Egypt. The campaign was initiated during the 2015–2016 scholastic year, when WHO supported the Endemic Diseases Department of the MoHP with the necessary operational costs to implement the campaign targeting an estimated 2 million school age children, in 2015–2016.

WHO provides procurement of all needed medication for leprosy, leishmaniasis and filariasis programmes, as well as medication related to the mass drug administration for soil- transmission of

helminthiasis and bilharzia elimination. To eliminate leprosy,

WHO supported the Egyptian government by organizing, supervising, monitoring and evaluating technical training of primary health care (PHC) unit teams and health care workers in leprosy clinics in the Delta and Upper Egypt. This support aimed to build

the capacity of health care workers on leprosy prevention and control and to increase community awareness to promote stigma reduction. Furthermore, WHO supported capacity-building and training, provided by University Oberta De Catalonia, for seven Egyptian physicians on managing skin diseases related to neglected tropical infections. Additional support was provided for securing the needed medications for treatment of leishmaniasis and leprosy as well as the procurement of vector control equipment. With close support from WHO to the national programme, WHO recognized the efforts to eliminate Lymphatic filariasis from Egypt as a public health challenge. The WHO issued an elimination certificate by December 2017.

## Immunization and vaccines

WHO commemorated World Immunization Week from 24 –30 April in Egypt. Under the theme #vaccineswork, WHO highlighted the vital importance of immunization as the most-effective preventative intervention in public health. World Immunization Week in 2017 called on governments and all stakeholders to ensure strong country commitment for immunization as a priority, and equitably extend the benefits of immunization to all people. It also highlights the progress achieved in past years in introducing new vaccines, increasing vaccination coverage and outlining the challenges faced by many countries in closing the immunization gap to meet global vaccination targets by 2020.

WHO supported capacity-building for health care workers on cold chain management as well as surveillance of fever and rash. With the support of WHO, the extended programme of immunization (EPI) team provided training sessions to build the capacity of health care workers on these two subjects. WHO also supported the central public health laboratory for the purchase of emergency test kits for measles and rubella.

Fever hospital: WHO in collaboration with the MoHP supported a mission to analyse the current practices and gaps in fever hospitals, and to determine the support needed. It also developed key performance indicators for fever hospital administrations as well as for the hospitals themselves. It also supported the national regulatory authorities in their decision to validate 3 million doses of BCG vaccine, and supported the development of the first national infectious diseases guidelines to be used across all fever hospitals while dealing with infectious cases.

## 5. Preparedness, surveillance and response

The final area of WHO collaboration in Egypt focuses on strengthening country capacities in prevention, preparedness, and response capabilities for all types of hazards, risks and emergencies that pose a threat to human health. The capacities needed for health in emergencies include those identified in the International Health Regulations (2005), as well as hazard-specific capacities related to natural disasters, conflict, emerging or re-emerging human and zoonotic diseases with the potential to cause outbreaks, epidemics or pandemics, chemical and radio-nuclear incidents, and antimicrobial drug resistance.

The programmes in the preparedness surveillance and response category are:

- Alert and response capacities.
- Epidemic and pandemic-prone diseases.
- Emergency risk and crisis management

During 2017, activities were conducted in collaboration with Ministry of Health and Population and national partners and stakeholders, including academia, research institutes, and NGOs. Activities ranged from conducting assessment missions of the national IHR public health core capacities, capacity-building activities in the form of training for the national staff, and procurement of needed lab equipment and supplies, to support for updating the national epidemic/pandemic preparedness and response plan and standard operating procedures. The main achievements in this area in 2017 were:

### 1. Establishing the sentinel surveillance system for acute infectious neurological diseases:

Between 2016 and 2017, the WHO country office in Egypt and the Communicable Disease Control Department at the Ministry of Health and Population worked together to establish the sentinel surveillance system

for acute infectious neurological diseases, including meningitis and encephalitis, in eight governorates. Several training workshops were conducted for health care workers and surveillance officers on case definition, case investigation and surveillance standard operating procedures. The main objective of the surveillance system is to provide quality data necessary for studying the burden of disease caused by each causative organism, and to assist evidence-based decision-making on the introduction of vaccines.

Within the same framework, WHO supported the central public health laboratory (CPHL) and the sentinel hospital labs with the needed lab supplies and reagents to enable the full identification of the causative agents. The provided support extended to deliver computers to the central and peripheral surveillance units in order to strengthen the electronic surveillance system through timely data reporting and analysis.

In August 2017, the first advocacy meeting for hospitals enrolled in the surveillance system for acute infectious neurological diseases was conducted in the presence of the head of the Central Directorate of Preventive Affairs and general directors and surveillance teams. The meeting aimed to present available epidemiological and laboratory data generated from the surveillance system and to highlight technical and financial challenges encountered during the establishment process, as well as success stories and achievements. In addition, some significant recommendations were concluded to strengthen the surveillance system and to ensure its sustainability. At the end of the meeting, the best performing surveillance officers and sites in the 2016 surveillance work received a certificate of honour.

Reported cases from the national routine surveillance prior to 2016 were clinically suspected cases but without laboratory confirmation. This situation raised the real need to initiate a laboratory-based sentinel surveillance system in order to provide quality data necessary for studying the burden of disease caused by each causative organism and to assist evidence-based decision-making for the introduction of new vaccines.



## 2. Establishment of sentinel site surveillance system of typhoid and paratyphoid fever:

Typhoid disease is a communicable disease of public health importance with 22 million cases of typhoid fever and 200 000 related deaths occurring worldwide each year; an additional six million cases of paratyphoid fever are estimated to occur annually<sup>1</sup>.

The scarceness of the current national data for typhoid and paratyphoid fever in Egypt triggered the need to establish a sentinel site surveillance system. Thus the communicable disease control department in the MoHP in collaboration with WHO established a sentinel surveillance system for typhoid and paratyphoid fever in several Egyptian governorates: Alexandria, Cairo, Giza, and Qena. Several training workshops were conducted for health care workers and surveillance officers in the selected fever hospitals on case definition, case investigation and surveillance standard operating procedures. The main objectives were to strengthen the routine surveillance system for typhoid and paratyphoid fever and to describe and explore the epidemiological profile of the presenting cases.

## 3. Celebration of World Rabies Day:

WHO in Egypt in collaboration with the Ministry of Health and Population launched a social media campaign on World Rabies Day, 28 September 2017 to raise awareness about the principles of disease prevention, injury avoidance from an infected animal, associated symptoms and post-exposure measures. Targeted messages were developed and used in the campaign to educate and inform the public.



Simultaneously the WHO country office in Egypt provided the necessary support to establish and strengthen the surveillance system for rabies in frontier and high-risk governorates. According to surveillance data people in Egypt experience more than 200 000 animal bites annually, mostly from dogs, and an average of 60 people die annually from rabies.

#### 4. First full-scale simulation exercise in response to a public health emergency event in Egypt:

The Ministry of Health and Population and the Ministry of Civil Aviation, in collaboration with the WHO country office in Egypt and the Regional Office, conducted the first full-scale public health emergency simulation exercise at Borg Al-Arab



international airport on 4 December 2017, in the presence of the Alexandria governor and high-level officials.

The Government of Egypt recognizes the importance of strengthening the public health system by building essential International Health Regulations (IHR) core capacities; at the forefront is strengthening critical IHR core capacity at the country's points of entry. Egypt's decision to conduct the simulation exercise was in response to WHO's global initiative to recognize simulation exercises as a key component in the validation of core capacities under the IHR monitoring and evaluation framework noted by the Sixty-ninth World Health Assembly<sup>2</sup>. The exercise scenario was adapted to a context of responsive measures that would be needed to respond to the arrival of passengers suspected of having an infectious epidemic disease, or viral haemorrhagic fever.

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2- See documents A6920/, Annex, and WHA692016//REC/3, summary records of Committee A, fifth meeting and seventh meeting, section 1.

The exercise evaluated the standard operating procedures related to infection prevention and control, epidemiological investigation, international notification and proper case management. More than 400 participants joined the exercise representing various stakeholders, including: General Quarantine Administration, Egyptian Holding Company for Airports and Air Navigation, Borg Al-Arab ground services, EgyptAir, Alexandria Fever Hospital, Egyptian Ambulance Authority, Ministry of Interior and others.

The exercise was deemed a success bolstered by the high level of commitment of national authorities towards emergency health preparedness at points of entry in Egypt. It was suggested that the exercise be expanded to include simulations at various points of entry and to include all relevant sectors in further exercises.

## **5. Studying behaviour change to tailor antimicrobial resistance programmes:**

The WHO country office in Egypt and the WHO Regional Office for the Eastern Mediterranean, in collaboration with Ain Shams University, have initiated a behavioural change study for tailoring antimicrobial resistance programmes. The study began with a five-day workshop in Cairo, 3 – 7 December 2017, and was inaugurated by Dr Abdel Wahab Ezzat, president of Ain-Shams University. Approximately 25 participants, including physicians, pharmacists, laboratory professionals, infectious disease prevention and control specialists and sociologists, attended the workshop.

The main objective of the study is to identify and validate culturally accepted, innovative and context-specific behaviour change interventions among health care providers regarding antibiotics prescription and dispensing practices, in order to combat the threat of antimicrobial resistance.

The study consists of three phases which are to be implemented over 6 months, and will include a variety of assessment methods that will focus on understanding behaviour related to prescriptions and antibiotics dispensing. Strategic interventions will be developed as part of the

first phase of the study, leading to the implementation and evaluation phases.

## 6. Addressing antimicrobial resistance during World Antibiotic Awareness Week:

Cairo University and the Ministry of Health and Population in collaboration with the WHO country office in Egypt, organized a scientific event on 19 November 2017 to discuss the issue of antimicrobial resistance during World Antibiotic Awareness Week under the global slogan “Always seek the



advice of a qualified health care practitioner before taking antibiotics”.

The event took place at the Faculty of Medicine in the presence of its dean, hospital directors, heads of clinical departments, members of the public health department, and representatives from different institutes and the Ministry of Health and Population. Cairo University Hospitals and the Ministry of Health and Population presented their achievements, identified challenges in establishing an effective antibiotic resistance surveillance system in their health care facilities and reviewed the way forward for future collaboration and coordination. This activity aimed to highlight the national situation of antimicrobial resistance, including threats to the health sector. It targeted medical students and hospital directors and heads of clinical departments in Cairo University Hospitals in promoting the need for research and encouraging the adoption of proactive measures to reduce antimicrobial resistance in Egypt. Discussions extended to the Ministry’s national multisectorial antimicrobial resistance action plan and the national capacities needed to achieve the five objectives of the plan:

- improving awareness and understanding of antimicrobial resistance through effective communication, education and training;
- strengthening knowledge through surveillance and research;
- reducing the incidence of infection through improved infection prevention and control measures;
- optimizing the use of antimicrobial agents in human and animal health;
- promoting research and innovation at the national level.

## 7. Celebrating Hand Hygiene Day in Egypt:



The WHO country office in Egypt organized a social event to mark Hand Hygiene Day on 5 May 2017. The event was organized in coordination with the Ministry of Health and Population and Ministry of Youth and Education and under the auspices of H E the Minister of Health and Population, Egypt.

The main event was conducted at Al-Asmarat neighbourhood in Cairo while similar activities took place in five other selected governorates: Alexandria, Menofya, Ismailia, Fayoum and Minya. More than 500 people, mainly children aged between 10 and 15 years old attended the event, in addition to representatives from civil society organizations and coordinating ministries.

The main theme of the event was in line with the global theme, “Fight antibiotic resistance – it’s in your hands”. A modified slogan, “Wash your hands to protect yourself and others around you”, was adapted to suit the local culture and community.

Participants were provided with educational materials, flyers and posters about the importance of hand hygiene and wore campaign T-shirts and caps displaying the campaign slogan.



Seven television spots addressing hand hygiene and antimicrobial resistance were broadcast during the event. . At the end of the day an educational musical show on hand hygiene was performed by a charity centre for orphans from the community.

## **8. Expanding the national health care-associated infections and antimicrobial resistance surveillance programme:**

The Ministry of Health and Population represented by the central administration of infection prevention and control department began a proactive, standardized, laboratory supported surveillance system for health care-associated infections and antimicrobial resistance in February 2016 in cooperation with the WHO country office in 15 hospitals in nine governorates. During 2017 the surveillance expanded to add another 17 hospitals from 17 governorates. The main objectives of the surveillance system are to estimate health care-associated infections (HAI) incidence to develop benchmarks for infections in Egypt and to describe microbiological profile and resistance pattern of pathogens causing HAIs.

During the expansion phase, MoHP changed the HAI lab-based surveillance system from paper electronic forms. This change will improve the performance of participating facilities regarding completeness of data and timeliness of reporting. It will also facilitate the flow of data, suitable actions, avoid unnecessary delays in reporting and analysis and result in timely sharing of information with decision makers to initiate needed

actions. In addition, MoHP proactively participated and shared antimicrobial resistance (AMR) data through the GLASS platform, being the first country in the Eastern Mediterranean region to upload their data on the platform.

## 9. Initiating the antimicrobial resistance national action plan of Egypt:

Following the AMR global initiative, the WHO country office is supporting the government of Egypt in drafting the antimicrobial resistance national action plan.

Towards this, an antimicrobial resistance coordination Committee was formulated within the MoHP including representatives from concerned departments: infection prevention and control, surveillance, central administration of pharmaceutical affairs, central public health laboratories, environmental health sector, quality control, training and research, national information centre and the curative sector.



Several meetings were conducted, participated by experts in human health, animal health, plant production, food chain and environmental health to discuss the AMR action plan and its strategic objectives and interventions, operational plan, and the monitoring and evaluation plan. The necessary measures to strengthen national capacities were

identified including the following five pillars: infection prevention and control; AMR surveillance; optimize AMR use including antimicrobial stewardship programme; public awareness; and investment in new medicines and other interventions (for example, vaccination, new diagnostic tools).

The need for an effective “one health approach” to tackle AMR in Egypt was emphasized and there was consensus on roles and responsibilities among concerned sectors. . It was recommended to formulate a higher ministerial committee that included other relevant ministries and stakeholders such as the ministries of agriculture, environment, education, industry, and higher education and research to finalize phase two of the national action plan and to be involved in the implementation process.

### **Poliomyelitis: 11 years of success in keeping Egypt free from polio**



WHO recognized Egypt as a polio-free country on February 2006; the last reported case was from Asyut in May 2004 after which two environmental samples of the indigenous wild virus were detected in January 2005.



WHO has supported the MoHP in its significant and efficient efforts to sustain a polio-free country status. While there is no cure or treatment for polio there are very effective vaccines for prevention which need to be administered several times to ensure a child's immunity.

Egypt was commended by WHO country office during World Polio Day 2017 for its great effort, in cooperation with different stakeholders and partners, to combat the disease and provide the prevention and protection means to Egyptian citizens throughout the country. WHO also supports the continuous high quality surveillance for early detection and response of any imported polio virus. This includes the acute flaccid paralysis (AFP) surveillance programme that is funded and technically supported by WHO on a yearly basis.

Furthermore, WHO provided the technical and financial support to implement

training workshops nationwide to increase awareness and prepare the expanded programme of immunization (EPI) staff for the switch from trivalent oral polio vaccine (tOPV) to bivalent oral polio vaccine (bOPV). In further assistance for this effort, WHO supports the independent monitoring of the switch of vaccines, the relevant environmental surveillance activities, and the work of the regional and national polio laboratories, including assisting in procurement of the annually-required equipment and tools.



## **Pandemic influenza preparedness**

Influenza pandemic occurs when a new influenza virus emerges and spreads around the world and most people do not have immunity. Viruses that have caused past pandemics typically originated from animal influenza viruses. Some aspects of influenza pandemics can appear similar to seasonal influenza while other characteristics may be quite different.

The WHO Pandemic Influenza Preparedness (PIP) Framework, one of the funding sources supporting the influenza surveillance system in Egypt since 2014, aims to improve pandemic influenza preparedness and response and strengthen protection against pandemic influenza. It also targets improving and strengthening the WHO global influenza surveillance and response system with the objective of a fair, transparent and efficient system for all.

During 2017, WHO collaborated with national stakeholders and partners in order to continue supporting the influenza surveillance system in Egypt. WHO in collaboration with the Ministry of Health and Population organized a workshop on outbreak investigation and rapid response for the peripheral Rapid Response Team at the governorate and district levels to raise the capacity of multi-disciplinary rapid response teams (RRTs) to timely and efficiently respond to potential outbreaks and health threats. The workshop introduced the comprehensive checklist of rapid response steps, including coordination of the epidemiological investigations, assessments, responses, data analysis, reports and communication for reference.

In addition, to support scaling up the national capacity of the sentinel and nationwide surveillance to detect and investigate Influenza virus subtype in Egypt, WHO in collaboration with MoHP supported nine training workshops for health workers from public hospitals, insurance and specialized medical centres and conducted assessment visits and onsite job training for influenza surveillance officers. Also more than 20 training workshops were organized to enhance the surveillance of acute respiratory infections and case management for health care management staff in chest and fever hospitals in Egypt. The training focused on upgrading the knowledge of participants about acute respiratory and influenza management protocols, increasing awareness of the standard operating procedures for diagnosis and management, and ensuring proper usage of anti-viral treatment.

Another two workshops have been organized by WHO with an overall objective to improve key knowledge for the practice of emergency risk communication among professionals at MoHP and, to be able to work with the media, to write and transmit a direct medical statement during public health events. As continuous support, WHO provided assessment visits for emergency departments, outpatient clinics, pharmacies, laboratories, inpatient departments and isolation rooms in 20 chest hospitals. These assessment services included checking the availability of information, education and communication material, as well as checking the availability of drugs such as Tamiflu, antibiotics, and other drugs, and the training provided to the medical team in the intensive care units.

Furthermore, WHO supported the National Influenza Centre (NIC) at the Central Public Health Laboratories (CPHL) in the purchase of a genetic sequencer which aids in the sequencing of any virus isolates in order to better characterize and understand the nature of the virus, its geographical distribution, the source of infection with new viruses and revise its treatment policies based on antiviral resistance testing.

Additionally, diagnostic reagents and test kits were provided to the NIC in addition to -80°C ultra-freezers and safety cabinets for the subnational influenza laboratories in Minya and Aswan governorates in Upper Egypt. Also, computers and laptops were delivered to the central and peripheral surveillance sites.

WHO in collaboration with NIC enhanced the timely sharing of influenza virus isolates and clinical specimens according to WHO Guidance, which resulted in an increase in consistent and timely reporting of influenza surveillance data to global (Flud and FluNet) and regional (EMFLU) database platforms.

WHO continues to provide technical support to the concerned health departments in the area of laboratory influenza surveillance in Egypt. WHO provided an assessment mission to the Aswan sub-national influenza laboratory and arranged a training workshop on biosafety measures that should be strictly followed and implemented when dealing with influenza samples collection, transportation and processing.

Two meetings were held with the head of NIC on 19 and 27 September to assess the current situation, identify the gaps and create an action plan. The plan was created and shared with the head of NIC, focusing on the following: issuing a preventive maintenance contract for NIC and the subnational labs to guarantee continuous good performance of machines; enforcing the quality of routine influenza testing in the subnational labs through sending a percentage of both negative and positive and all untyped samples to NIC for retesting; establishing a computerized inventory system to avoid any shortage in reagents and supplies and interruption of workflow; and facilitating two types of trainings on-site training for influenza sequencing and biosafety trainings.

On-site training on the new genetic sequencer for viruses was requested and the country office identified Dr Andrey B. Komissarov, head of the St Petersburg National Influenza Centre, as a training expert; preparation activities for the upcoming training is ongoing.

WHO in collaboration with MoHP launched a media campaign that featured the airing of radio spots during influenza season 2017–2018 to raise public awareness about influenza, methods of prevention and the importance of vaccines.

## # كيف تحمي التلاميذ في المدارس والحضانات من الإصابة بالإنفلونزا

**أ ب ج د**

**قسط النخ التعليمات الوقائية الآتية**

- 1. تجنب التواجد بمحاذاة جدران القاعات، فترات الراحة خارج قاعات الصف، تجنب لمس الأسطح الملوثة.
- 2. تجنب التواجد في أماكن بها أشخاص مصابين بالإنفلونزا، خاصة في الأماكن المغلقة.
- 3. تجنب التواجد في أماكن بها أشخاص مصابين بالإنفلونزا، خاصة في الأماكن المغلقة.
- 4. تجنب التواجد في أماكن بها أشخاص مصابين بالإنفلونزا، خاصة في الأماكن المغلقة.

**الوقاية خير من العلاج**

## # احصلي على دعم آمن ضد فيروس الإنفلونزا

**أحمي نفسك واسرتك ضد فيروس الإنفلونزا**

**الإنفلونزا**

هو ذو فيروسية خلية، ينتقل بسهولة من شخص إلى آخر، فهو يصيب الإنسان لإحداث أعراض خطيرة خاصة لدى كبار السن، الأطفال، والحوامل.

**يُعتبر التطعيم المنسوي ضد فيروس الإنفلونزا إجراءً هاماً للوقاية من العدوى.**

يمكن تلقي التطعيم ضد الإنفلونزا...

**الأشخاص الذين يعانون من:**

- أمراض مزمنة
- أمراض القلب
- أمراض الجهاز التنفسي
- أمراض الدم
- أمراض الكلى
- أمراض الجهاز الهضمي
- أمراض العيون
- أمراض الأذن
- أمراض الجلد
- أمراض الحساسية
- أمراض المناعة

**الوقاية خير من العلاج**

WHO supported designing, printing, and distributing information and educational material such as posters, and flyers about influenza, and how to protect children at schools and nurseries.

WHO extended its technical support to national counterparts to draft a manuscript for publication describing the influenza epidemic and intensity thresholds in Egypt using influenza surveillance data.

## Health needs of Syrian refugees in Egypt



WHO in Egypt aims to support and sustain the 126 688 registered Syrian refugees (UNHCR December 2017), beginning from the start of the Syrian crisis, by providing a health programme that addresses their health needs in Egypt.

As a part of the Regional Refugees Resilience Plan (3RP) to response to the Syrian crisis, WHO is directly responsible for coordinating health services for Syrians in collaboration with the national health authorities and relevant partners committed to the Syrian refugees' health cause in Egypt. The Syrian refugee population in Egypt is fully integrated and largely urbanized among the host communities in Egyptian governorates including Cairo, Qalyubiya, Giza, Alexandria, Sharqia and Damietta. The Government of Egypt has granted the same health care benefits to Syrian refugees as for Egyptian population which poses a burden on the Egyptian health care system. In addition, the out-of-pocket expenditures have reached up to 60% of total health expenditure and leave Syrian

refugees exposed to major health expenditure when seeking curative secondary level care. Syrian refugees have varying degrees of access to basic sanitation and available health services which causes additional pressure on existing health systems in Egypt.

Major health conditions present in the Syrian refugee population include maternal and reproductive health issues, cardiovascular diseases, respiratory infections, cancer and diabetes, in addition to medical emergencies that require hospitalization. WHO is supporting the Ministry of Health and Population to make health care services available to Syrian refugees through different measures and tools, such as capacity-building training.

WHO continues its support to the Ministry of Health and Population to ensure and build capacity of health care professionals to provide quality services to Syrian refugees in Egypt. It assists in covering the basic right of access to health care and to provide the essential health care services free-of-charge.

The main activities for Syrian refugees in Egypt during 2017 were the following:

### **1. Access to emergency and medical services by Syrian refugee patients:**

WHO, in collaboration with specialized medical centres in the Ministry of Health and Population, supports the high quality standards of medical services to Syrian patients in 12 hospitals in the governorates of Cairo, Giza, Qalyubiya, Damietta and Alexandria.



These medical services ensure that the parameters for emergency and life-threatening conditions are under regular supervision in order to maintain and monitor the data case management and financial databases in the selected hospitals.



These medical services are provided to patients who have medical conditions that need to be treated. As a result of this collaboration, 301 Syrian refugee patients were treated and received high quality health care services for life-threatening emergencies at specialized medical facilities.

## 2. Rehabilitation programme for Syrian children with mental disabilities:

The rehabilitation programme endorses three main objectives: to achieve developmental gains for Syrian children; better integration, for Syrian children and their parents; and raising the capacities of Syrian therapists and trainers. Accordingly, WHO provided two phases of the rehabilitation programme in 2017.





In the first phase, 45 Syrian children living with disabilities and their parents were assisted, and 10 Syrian instructors participated in a capacity-building training programme. In the second phase 42 Syrian children and their parents participated in the same provided activities and training for the Syrian refugee instructors.

### The goals of the rehabilitation programme were:

- **Syrian children with disabilities:** The rehabilitation programme focuses on self-confidence and positive behaviour among the mentally disable children nominated by developing their auditory, visual, mental, and movement capabilities. It supports developing the skills of every child, providing the counselling and training needed for families, and offering medical services, physical therapy, and psychological services.

- **Parents of Syrian children with disabilities:**

The rehabilitation programme offers knowledge about the immeasurable worth of their child and how to deal with the special conditions of their child without any discrimination.



Besides, it supports the parents to accelerate the development of their child's skills and allow them appropriate counselling.

Syrian therapists and trainers: The programme offered capacity-building training to improve their skills. WHO faced a challenge in the first phase of the project to find qualified Syrians to join the medical team, especially for speech and language therapy.



**3. Health adolescence awareness programme:** WHO in collaboration with the school age children health care department of the Ministry of Health and Population conducted a comprehensive Adolescent Health Training for 150 Syrian refugee adolescents in six governorates: Cairo, Giza, Alexandria, Damietta, Sharqia and Qalyubiya.

The training aimed to inform Syrian adolescent and youth refugees about the services that can be provided from MoHP and the primary health care facilities. It focused on providing the adolescents with complete knowledge on important topics such as re productive and sex-



ual health, healthy lifestyle and physical health, nutrition and its problems, and mental and oral health problems. The programme aims to improve the efficiency of services provided to adolescents and young Syrian refugees in Egypt.

2. **A comprehensive capacity-building training programmes for Syrian refugee community workers and paramedics:** WHO collaborated with the Egyptian Red Crescent to conduct capacity-building for Syrian residents in six Egyptian Governorates, a total of 348 trainees received the following training:

- **Community-based first aid:**



This training was provided to 150 Syrian refugee community workers, to build the resilience of their communities through providing knowledge, tools and practical application on community risk assessment, identifying risks and hazards, minimizing risks through community-based initiatives and disseminating a culture of prevention and safety. The training included community planning for identified risks with focus on topics such as epidemics, climate-related disasters, domestic fires.

- **Community-based disaster risk deduction:**

This activity aimed to engage the local community in active promotion of health through dissemination of knowledge regarding diseases, prevention and home-care.



Local community members were encouraged to take initiatives that encourage health practices especially among women, children and youth. The training consisted of five modules including CD, NCD, health promotion and communication skills, health in emergencies and community first aid, with field assessments followed by debriefing to identify areas of importance for health promotion. The training programme was provided to 150 Syrian refugee community workers at six governorates with areas of a concentrated Syrian refugee population.

- **Capacity-building training programme for Syrian paramedics:**



\_Training was provided to 48 Syrian refugee paramedics in basic knowledge for first aid, infection control, and home-based care for patients.

**5. Capacity-building training programmes for Syrian refugee teachers on school -age health care:** WHO in collaboration with the school age children health care department at the Ministry of Health and Population conducted a community orientation programme for 180 Syrian refugee teachers on school-age health working with Syrian refugee students in governorates with a con-

centrated Syrian refugee population, to raise their awareness on important topics of related to school age health, such as:

- role of school age health
- first aid for emergencies that may occur inside schools
- healthy life style and physical activity
- nutrition for children and adolescents
- mental health problems
- school violence
- oral health
- communicable diseases
- non-communicable diseases
- improve the efficiency and effectiveness of services provided to refugee adolescents and young people in the targeted governorates
- risks of smoking and drug addiction in youth

**6. World Health Day for new Syrian refugee arrivals:** WHO organized advocacy activities on World Health Day to orient the newly displaced Syrian refugees with the available health services.



## 7. Health Advocacy Day for Syrian refugee parents with children living with disabilities:



WHO conducted an advocacy day for Syrian refugee parents having children with disabilities" at 6<sup>th</sup> of October city, Giza governorate, for emphasizing the role of parents and the society to stop and prevent stigma against children living with disabilities. Seventy-five Syrian refugee parents participated at this event and shared their experiences and stories about the challenges they face.

### Promoting resilience

Capacity-building training for national health workers in the MoHP surveillance department: WHO organized a capacity-building training to 1220 national staff from the surveillance department at the Ministry Health and Population in areas with a concentrated Syrian refugee population, in order to achieve the following goals:

- Improve the early detection, recognition, preparedness and response to outbreaks
- Enhance comprehensiveness of surveillance related to the networks in Egypt
- Sustain and expand EWARN in refugee dense areas and entry frontiers.

- Amplify the Event Based Surveillance (EBS) in nine governorates
- Reinforce emerging diseases preparedness
- Upgrade information technologies needed to NEDESS, EWARS and EB.
- Update guidelines and standard operating procedures for communicable diseases under surveillance

Furthermore, WHO purchased 15 computers to enhance the reporting network of EWARN.

## Integration of mental health and noncommunicable diseases at the primary health care level in Syrian refugee concentrated areas:

WHO collaborated with a mental health consultant to provide advanced technical expertise to the process aiming at the integration of mental health services into primary health care facilities. The best integration module of mental health (WHO mhGAP) in PHC facilities considers the available human resources, infrastructure, drugs availability, administration and management. The outcome of this project is the provision of training of trainers to 150 health care staff - physicians, nurses and social workers - in 18 PHC facilities in districts and



directorates in the six governorates of Syrian refugee concentrated areas. The WHO Global Action Plan for NCDs was considered the best model of integration of noncommunicable diseases at selected PHC facilities. WHO collaborated with an NCD consultant on the process of integration, after assessing the current status of NCD services. The NCD consultant prepared a training of trainers programme for 25 master trainers from the MoHP for the sustainability of capacity-building for the integration of NCDs. The 25 master trainers conducted a comprehensive capacity-building programme to 450 physicians, pharmacists and nurses to support the integration modules at the 18 PHCs facilities in the Syrian refugee areas.

## **Updating the Health Needs Assessment for Syrian refugees in Egypt:**

In collaboration with the surveillance unit in the Ministry of Health and Population and a consultant from the Community Medicine department at the Faculty of Medicine at Ain Shams University, WHO updated the Health Needs Assessment for displaced Syrians in Egypt that was conducted in 2015. As the health cluster lead, WHO embarked on this assessment as mandated by the Emergency Response Framework core functions of providing health-related information. The purpose of this assessment is to support rational decision-making concerning the health, needs and services for the displaced Syrians. The updating assessment will include a health, reproductive and demographic characteristics of a representative sample of displaced Syrians households in Egypt. In addition, it aims to update the health status of adults and children in the study sample and measure the prevalence of different health problems among displaced Syrians, including reproductive health problems among females and acute, chronic diseases, mental problems among children and adults. The study assesses also the knowledge, utilization, accessibility, and satisfaction of health services among displaced Syrian population in Egypt.



## Emergency Response Preparedness programme

### Emergency Response Preparedness for All-Hazards Workshop in South Sinai Governorate:

WHO country office in Egypt, in collaboration with the Health Directorate of the Ministry of Health and Population, in South Sinai, has conducted the first emergency response preparedness workshop for all hazards. 34 representatives of different stakeholders: the Ministries of Health and Population, Education, Civil Defence, Social Solidarity and Interior Affairs, joined the workshop, and discussed issues of relevance at national and international level, shared best practices and lessons, and observed presentations on all hazards risk assessment and response by using STAR tools.

### Emergency Hazard Map:



WHO collaborated with the National Information Centre for Health and Population (NICHP) to use GIS technology which has four major functions such as geographic data management, data compilation, and editing geographic analysis, and mapping, visualization. WHO supported them to produce high quality GIS data and information. In addition,

collecting, evaluating, structuring and sharing the multitude of data that are needed for disaster risk management and planning is a formidable challenge because this data cannot be completed without involving stakeholders. During the implementation of this project, 15 National staff from NICHHP were trained to apply and use the Emergency Hazard Map.

### Vaccine management workshop:



WHO organized a capacity-building workshop to gain insights into complete cold chain operations and oversight on vaccine and cold chain management. This workshop aimed to build the capacity of 99 national staff, on the central and district levels. It attempts to update the health needs assessment for Syrian refugees in Egypt and improve the capacity of MoHP staff in Emergency Management.

# Communication and Media

## WHO newsletter:

Issue: 1 July- Sep 2017

**NEWS LETTER**  World Health Organization  
Egypt

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**New STEPwise 2016-2017 survey in Egypt.**

A new successful collaboration between WHO/Egypt and MOHP and CAPMAS

WHO/Egypt in collaboration with the Ministry of Health and Population and the Central Agency for Public Mobilization and Statistics (CAPMAS) started a new round of the STEPwise survey for 2016-2017 on 2 of August 2017 in Egypt.

The second round is still in the phase of field work and data collection that will be implemented in 23 governorates (except the borders one that are excluded for security reasons) in Egypt. Almost 50% of the field work targeted governorates - in Lower Egypt and Delta areas- have been finalized.



According to the agreed upon timeline of the survey, the field work should be finalized by the end of September 2017. The new phase will be dedicated for sample weighting and data review, analysis and interpretation in order to release the survey fact sheet by the end of 2017.

In addition, a short movie will be produced to document the different steps of the implementation of STEPwise survey 2016-2017 and show the perfect harmony and successful collaboration between the MOHP and CAPMAS and WHO/Egypt, as a real model of a team work.

The new second round of the STEPwise2016-2017 survey has collected accurate data that will enable comparison with the data from the previous survey conducted in 2011-2012.

The STEPwise survey 2016-2017 will support the Egypt Health system in planning and determining public health priorities in order to predict the cascloads of noncommunicable diseases in addition to evaluate existing population-wide interventions.

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Issue: 2 December 2017

**NEWS LETTER**  World Health Organization  
Egypt

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**Launch of the third National Soil Transmitted Helminths Deworming campaign for School Aged children in Egypt**



WHO/Egypt and the Ministry of Health and Population, in collaboration with UNICEF, launched the third National Soil Transmitted Helminths Deworming Mass Drug administration campaign in all primary schools to eliminate intestinal worms. The campaign started from the 15<sup>th</sup> of October to 26<sup>th</sup> October 2017, in 27 governorates for the third time after the initiation in the scholastic year 2015-16.It is worth mentioning that WHO/Egypt has donated more than 14 million Mebendazole tablets to MOHP to be distributed to the primary school students as part of the ongoing support for the health sector in Egypt, towards a better health future for Egyptian children. WHO/Egypt continues its collaboration with national counterparts at the health sector and other concerned sectors to promote public health programs including activities related to Neglected Tropical Diseases (NTDs).

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The WHO country office in Egypt launched its first issue of a periodical newsletter in September 2017. The second issue was released in December 2017 and the third issue was released in March 2018.

## Annual Report:

This is WHO in Egypt's second annual report that summarizes work and efforts in collaboration with the national counterpart, the Ministry of Health and Population in Egypt. The first annual report was launched in 2016.

## Awareness Campaigns:

**Road Safety Awareness Campaign:** WHO organized a road safety awareness campaign in Egypt in collaboration with the Ministry of Health and Population, the Ministry of Interior, and the Ministry of Transportation.



## Influenza Campaign:

WHO in collaboration with the MoPH aired an influenza campaign in the media and released information, education and communication material on its social media platforms.

## Health Events:

### Hand Hygiene Day 2017:

The WHO country office in Egypt organized a social event to celebrate Hand Hygiene Day on 5 May 2017, in coordination with the Ministries of Health and Population, Youth and Education and under the auspices of H E the Minister of Health and Population.



The main event was conducted at Al-Asmarat neighbourhood in Cairo; concurrently similar activities took place in five other selected governorates – Alexandria, Menofya, Ismailia, Fayoum and Minya.

### World Hepatitis Day:

To raise the public's awareness of hepatitis prevention and control on World Hepatitis Day, the WHO country office launched a social media campaign with information, education and communication materials produced in Arabic.



### Marking World Rabies Day in Egypt:

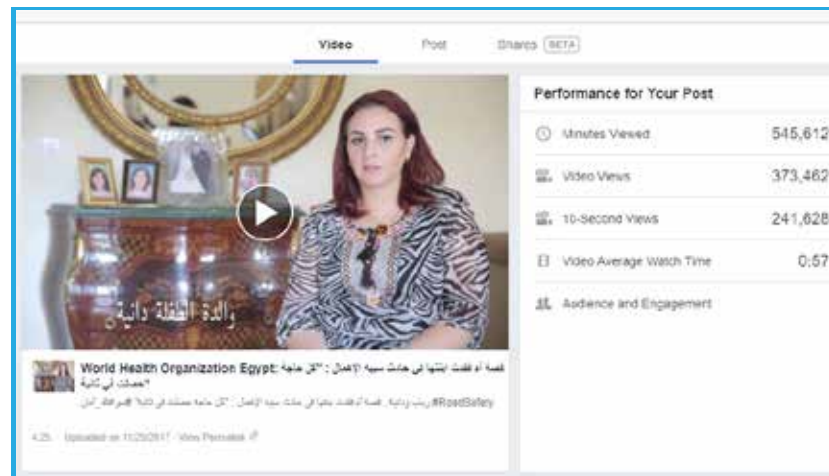
WHO in collaboration with the Ministry of Health and Population launched a social media campaign on World Rabies Day, 28 September 2017 to raise community awareness about principles of disease prevention, injury avoidance from an infected animal, associated symptoms and post exposure measures.



## Social media platform

Ten months ago, WHO in Egypt reached almost 3000 likes on its Facebook page, and by end of year had almost 15 000 likes. Content was divided into three types:

- Sharing human stories, for example “Dania’s Story”, a mother who lost her daughter in a car accident, reached almost 500 000 views on WHO’s Facebook page.



- Health awareness videos provide the public with medical information and health advice as needed.



- Intranet and internet stories highlight the WHO country office in Egypt’s work and efforts in its collaboration with different partners and stakeholders

Ten months ago WHO in Egypt had 200 followers, and by end of year the platform reached 1076 followers.

Recently, WHO added an official account on Instagram to its social media profile.  Follow us on Instagram

WHO has forged partnerships with online and digital partners for health activities. For example, “Bey2olak”, a popular application that supports the community by partly easing the pain of traffic jams in Egypt with 2.7 million followers, was a partner with WHO in the road safety campaign in October 2017.



## Management and Administration:

WHO leadership and management continues its support for delivering services to the national counterpart. Through 2017, WHO supported various activities financially and technically such as: creating and releasing the road safety campaign, producing TV spots for the family planning campaign, and establishing a call centre for hepatitis C within the national viral hepatitis programme in Egypt.

WHO provides full technical and timely support in different key public health areas to the government through effective networking with the officials at all levels of the Ministry of Health and Population, in addition to strengthening the technical capacity and capacity-building through collaboration with the WHO Eastern Mediterranean Regional Office and WHO headquarters, and elsewhere that can ensure partnership with the Ministry of Health and Population.

In October 2017, a special mission of the independent expert oversight advisory (IEOAC) visited the WHO office. The mission praised the efforts of the country office for working closely with partners and stakeholders from the different health sectors, for expediting the outstanding Direct Financial Cooperation (DFC) reports and for maintaining zero outstanding face reports for more than year. In addition, the mission commended the strong positive teamwork and the strong internal control system. The official report of the IEOAC will be submitted to the Executive Board during its January 2018 meeting.

The WHO country offices improved compliance with WHO rules and regulations by taking into consideration appropriate contractual modalities during the implementation phase. Accordingly, WHO and the Ministry of Health and Population were briefed on the Direct Financial Cooperation procedures; this led to more timely submission and better quality of face reports.



WHO in Egypt continued to focus on country priorities and provided support to major activities as per the joint collaboration programme for 2016–2017 biennium strengthening the bottom-up approach in planning. In 2017, WHO was also actively involved in the UNPDF and worked closely with the Ministry of Health and Population on the health pillar of the Sustainable Development Strategy 2030.

Fundraising is crucial; with the budget centre in Egypt more reliant on flexible funds, there are limited resources available to fund programme areas so much effort has been made to attract donors to support potential projects in Egypt, for example, for Syrian refugees, NCDs, and hepatitis C.

Monitoring tools are utilized to ensure that encumbrances are liquidated, and outstanding Direct Financial Cooperation and Direct Implementation awards are followed up, and the award end dates are monitored. In addition, all administrative guidance, rules, and regulations are followed to ensure compliance.

The bottom-up planning process to develop the programme budget for 2018-2019 has been completed, in consultation with national counterparts. End-of-biennium reporting was completed to reflect the achievements for the period and to guarantee that available limited resources are prioritized to ensure the implementation of programmes, services, and activities during the biennium 2016-2017.

Overall monitoring and evaluation of the WHO work plans were key to follow up the planned activities and provide the support needed to all categories for delivering and managing programmes and plans with effective utilization of available resources. During 2017,

the total support provided to the Egyptian government was distributed as follows:

| WHO Areas of Work  | Expenditures (USD)<br>2017 |
|--|----------------------------|
| Communicable diseases*                                     | 3,944,139                  |
| Polio  | 575,002                    |
| Logistics, capacity-building – (inactivated polio vaccine) | 2,372                      |
| Noncommunicable diseases                                   | 339,051                    |
| Health systems   | 190,908                    |
| Syrian refugees programme                                  | 428,402                    |
| Pandemic influenza preparedness                            | 301,217                    |
| Surveillance, preparedness and response                    | 63,219                     |
| Promoting health across the life-course                    | 121,202                    |
| Strengthening technical capacities                         | 88,664                     |
| <b>Grand total</b>   | <b>6 054 176</b>           |

\* includes US\$ 3.6 million for the cost of in-kind supplies and medications.

## Partnership

In addition to the continuing importance of good collaboration with the three levels of the organization, inter-country coordination takes prominent attention on the WHO country office agenda. In order to deliver the best possible technical support to Government of Egypt, WHO aims to work as one UN family; therefore synchronization with partners is taking place on different levels and includes different health-relevant organizations, with the prime concern of fostering information-sharing, consultation, cooperation and collaboration. WHO in Egypt regularly and actively attends the UN Country Team (UNCT) meetings; also the WHO country office, in the capacity of the WHO Representative, co-chairs with the MoHP the Development Partners Group meetings under the auspices of the Resident Coordinator, and WHO participated proactively in the development of the United Nations Partners Development Framework (UNPDF) for 2017–2022. Furthermore, WHO Egypt co-chairs the Health Partners Working Group for displaced Syrian refugees in Egypt along with UNHCR, and participates in the monthly Inter-Agencies meeting for refugee protection issues in Egypt. WHO coordinates regular meetings with agencies concerned with health projects to coordinate efforts to provide the most effective support to the MoHP. WHO is also a member of the Operations Management Team and attends meetings regularly. The WHO Representative ensures that the Security Management Team meeting is always attended in person to make sure that all security measures are complied with for better safety of the staff members.

# WHO Representative Office, Egypt

## WR Egypt



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### WR Assistant



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# Administrative staff Members

## Administrative officer



**Ms. Mervat Habib**

Programme Assistant

Finance Assistant

Team Assistant

Team Assistant



**Ms. Abeer Hassan**



**Mr. Amr Bassal**



**Ms. Mervat Ismail**



**Ms. Pakinam Rohaiem**

## IT help desk



**Mr. Mustafa Abu Elhassan**

## Messengers



**Mr. Hani Abdo**



**Mr. Mahmoud Salah**

## Drivers



**Mr. Elhami Abdo**



**Mr. Hazem Farrag**




**Mr. Ramdan Ragab**









This annual report of the WHO country office in Egypt highlights the work of the Organization undertaken in Egypt in 2017, in partnership with the Ministry of Health, and presents key achievements. It covers areas of strategic importance: health system strengthening towards universal health coverage; promoting health across the life-course; noncommunicable diseases; communicable diseases; and preparedness, surveillance and response, focusing in part on the health needs of Syrian refugees in the country. WHO works in partnership with the Government to ensure the highest attainable level of health for all citizens of Egypt.