Foreword

The Government of Afghanistan and WHO are working together to effectively improve the public health situation in the country with special emphasis on the five key regional priorities:

- health security and prevention and control of communicable diseases;
- noncommunicable diseases, mental health, violence and injuries, and nutrition;
- promoting health through the life-course;
- health systems strengthening; and
- preparedness, surveillance and response.

The strategic directions to address these priorities are broadly in line with WHO's 12th General Programme of Work, the Programme Budget 2016-2017 endorsed in May 2015 by the 68th World Health Assembly and the five strategic areas of work endorsed by the WHO Regional Committee for the Eastern Mediterranean in 2012.

Reliable and timely health information is essential for policy development, proper health management, evidence-based decision-making, rational resource allocation and monitoring and evaluation of the public health situation. While the demand for health information is increasing in terms of quantity, quality and levels of disaggregation, the response to these needs has been hampered because of fragmentation and major gaps and weaknesses in national health information systems.

The strengthening of health information systems is a priority for WHO in the Region. Intensive work with Member States since 2012 has resulted in a clear framework for health information systems and 68 core indicators that focus on three main components: 1) monitoring health determinants and risks; 2) assessing health status, including morbidity and cause-specific mortality; and 3) assessing health system response. In order to successfully achieve this important goal, concerted and aligned action at national and international level are required to address the gaps and challenges in the health information systems of all countries. This will ensure the generation of more effective evidence to monitor improvement in the health situation, nationally, regionally and globally.

This comprehensive health profile is intended to serve as a tool to monitor progress in the health of the population. WHO's collaboration with its Member States will strengthen the national health information systems, and enable the generation of timely and reliable evidence to assess the health situation and trends, and the health system response. Most important, it will provide the information needed by health policy and decision-makers.
Introduction

The population of the country has increased by 63.3% in the past 25 years, reaching 32 million in 2015, and is projected to increase by an additional 37.0% in the next 25 years. It is estimated that 74.5% of the population lives in rural settings (2012), 16.3% of the population is between the ages of 15 and 24 years (2015) and life expectancy at birth is 60 years (2012). The literacy rate for adolescents aged 15 to 24 years is 47.0%; for adults it is 31.7%, and for adult women it is 17.6% (2011).

The burden of disease (2012) attributable to communicable diseases is 46.0%, noncommunicable diseases is 36.6% and injuries is 17.4%. The high share of out-of-pocket expenditure (78.8% in 2013) and reliance on donors to support health services is unsustainable in the long term. The health workforce density is 2.3 physicians and 5.0 nurses and midwives per 10 000 population (2011).

The public health issues facing the country are presented in the following sections: communicable diseases, noncommunicable diseases, promoting health across the life course, health systems strengthening and preparedness, surveillance and response. Each section focuses on the current situation, opportunities and challenges faced and the way forward. In addition, trends in population dynamics and in selected health indicators are analysed to provide policy-makers with evidence and forecasts for planning.
Communicable diseases

HIV/AIDS
Tuberculosis
Malaria
Neglected tropical diseases
Vaccine-preventable diseases
Communicable diseases


- Standard operating procedures and an integrated vector-management strategy with the malaria and leishmaniasis control programme have been developed.

- Implementation of the community-based management of malaria in high-risk districts has begun.

- The national leprosy elimination programme has focused on training health workers and dermatologists on leprosy.

- A new vaccine for hepatitis B has been introduced and pneumococcal vaccine is planned for introduction into the routine vaccination schedule in 2015.

HIV/AIDS

HIV prevalence is low. The most affected population is people who inject drugs, with an overall HIV prevalence of 7.0%, although 94.0% report using sterile injecting equipment (1). Prevalence among female sex workers is 0.0% and among men who have sex with men is 1.0% (1). The estimated number of pregnant women living with HIV is less than 200 (2) while antiretroviral therapy coverage to prevent mother-to-child transmission is 1.0% (1). Routine testing is administered on 52.0% of blood collected and the estimated coverage of antiretroviral therapy is 3.0% (1).

A national strategic plan on HIV and AIDS is in place. A number of services are offered targeting people who inject drugs, including needle exchange programmes and a limited opioid substitution therapy programme, but coverage remains insufficient. Interventions currently target people who inject drugs, sex workers and men who have sex with men. HIV is diagnosed in voluntary counselling and testing centres. There are national guidelines for diagnosing HIV and preventing mother-to-child transmission, but HIV tests are not routinely offered to pregnant women. Evidence indicates that HIV is currently spreading from people who inject drugs to their sexual partners and thus to the general population. This will continue unless effective, vigorous and sustained action is taken. Diagnostic services are integrated with the HIV/AIDS programme; however, there is no specialized treatment for hepatitis.

The Ministry of Public Health is in the process of finalizing the new strategy for HIV/AIDS prevention and control for the period 2016–2021 with the following strategic directions: expanding harm reduction interventions, including opioid substitution therapy; increasing...
the number of antiretroviral therapy centres; strengthening the surveillance system; improving the institutional capacity on prevention, control and disease management; and enhancing the enabling environment for sustained response to HIV. The Ministry of Public Health plans to improve awareness and surveillance and to introduce treatment and care for hepatitis.

### Tuberculosis

The tuberculosis-related mortality rate is estimated at 42 per 100 000 population (3). A total of 31 622 detected tuberculosis cases were reported in 2013, of which 14 277 were new sputum smear-positive cases (3). The treatment success rate of new and relapsed cases registered in 2012 was 88.0% (3). Drug-resistant tuberculosis is estimated at 3.7% among new cases and 20.0% among previously treated cases (3).

Tuberculosis continues to be a major public health problem despite advancements in diagnostic procedures and availability of medicines. The country is experiencing major gaps in financing and infrastructure to expand drug resistance management, particularly in reaching vulnerable populations and diagnosing and treating drug-resistant tuberculosis. The referral system is weak and patients tend to migrate to larger urban centres, such as Kabul, to seek treatment. Emerging drug-resistant tuberculosis and its management represents a serious challenge for the tuberculosis control programme as do the growing security concerns.

Support is needed to improve the diagnostic capacity of the laboratories in order to identify tuberculosis and multidrug-resistant tuberculosis cases as early as possible and to improve and scale up their management.

### Malaria

The country is considered to be a high burden and high risk country for malaria. The total confirmed malaria cases decreased by 85% between 2003 and 2012, from 360 940 to 54 840 cases, respectively (4). Among the confirmed cases in 2013, 2.2% were *Plasmodium falciparum* and 97.8% were *P. vivax* (4). Coverage in targeted areas for households with at least one long-lasting insecticidal net for malaria prevention is 43.4%, and 28.6% of people with at least one net report having slept under a long-lasting insecticidal net the previous night (4).

Challenges include insecurity; logistical barriers, such as limited road access in some areas; inadequate and delayed financial resources; inconsistent levels of government and donor commitment; weak coordination of approaches among partners; insufficient trained staff at various levels, low salaries of government staff leading to high turnover; weak laboratory
quality control and quality assurance programmes at national and provincial levels; and limited information for planning, monitoring and evaluation of malaria control activities.

As the burden of malaria decreases, eight provinces in the northeast, north and western regions are being considered for *P. falciparum* elimination. Accelerated control interventions are being considered for other provinces.

**Neglected tropical diseases**

The country was certified free of dracunculiasis in 2007 but is still endemic for cutaneous and visceral leishmaniasis, as well as blinding trachoma (5). In 2012, 33,894 cases of cutaneous leishmaniasis and 24 cases of visceral leishmaniasis were reported. In 2013, 39 cases of leprosy were reported (5). In 2010, more than 2.5 million people were treated for soil-transmitted helminthiasis and 203 people were treated for trachoma (5).

The leprosy elimination programme is being implemented by the international nongovernmental organization LEPCO (LEProsyCOntrol) and the national grants management system. The most challenging problem related to leprosy control is the financial burden on communities, which hampers access to care. Political commitment and financing are major concerns. Leishmaniasis diagnosis and case management are integrated into the framework of the basic package of health services, however, availability of medicines is a challenge.

Priorities include re-establishment of the national soil-transmitted leishmaniasis control programme as a partnership between the Ministry of Public Health, World Food Programme and WHO as well as a progressive scale-up of treatment with WHO-donated medicines.

**Vaccine-preventable diseases**

Immunization coverage among 1-year-olds improved between 1990 and 2013 for BCG from 30.0% to 75.0%, DTP3 from 25.0% to 71.0%, measles from 20.0% to 75.0% and polio from 25.0% to 71.0% (6). Neonatal tetanus coverage increased during the same period from 13.0% to 65.0% (6). In 2013, hepatitis B vaccine coverage among 1-year-olds was 71.0% (6).

There has been an improvement in overall routine immunization coverage for traditional and new and underutilized vaccines. The current vaccine-preventable disease surveillance system has the capacity to detect sporadic cases and outbreaks at an early stage, with regular reporting from sentinel sites. Measles outbreaks are still occurring and maternal and neonatal tetanus has not been eliminated. The objectives of the national immunization programme are to achieve 90.0% coverage with all antigens nationally and at least 80.0% coverage in all districts.
The Ministry of Public Health aims to achieve the following targets by 2015: coverage with the basic package of health services of more than 90.0% of the population, increased immunization coverage with DTP3 and measles vaccine to 90.0% and achievement of polio eradication. In addition, the Ministry plans to introduce inactivated polio vaccine and hepatitis B (birth dose) in 2015 and rotavirus vaccine by 2017.
Noncommunicable diseases

Noncommunicable diseases

Mental health and substance abuse

Violence and injury

Disabilities and rehabilitation

Nutrition
Noncommunicable diseases

- A national strategy has been developed for the prevention and control of noncommunicable diseases addressing risk factor prevention, integration and strengthening of noncommunicable diseases management in primary health care, as well as the establishment of a noncommunicable diseases surveillance system.

- Mental health is designated as one of the priorities in the national strategy, and is included in the basic package of health services and essential package of hospital services.

- In 2014, the Ministry of Public Health implemented child growth monitoring in five provinces and supported the renovation of three therapeutic feeding units.

Noncommunicable diseases

The burden of noncommunicable diseases is rising and accounts for 36.6% of all deaths; cardiovascular diseases account for 18.6%, cancers 6.2%, respiratory diseases 2.7% and diabetes mellitus 1.4% of all deaths (7). As a result, 31.0% of adults aged 30 to 70 years have a probability of dying from one of the four main noncommunicable diseases (8). More than 8.6% of young people aged 13–15 years (8.7% boys, 8.1% girls) have ever smoked cigarettes, while 23.7% report having been affected by passive smoking (9). Per capita consumption of alcohol is 0.7 litres of pure alcohol (10). Raised blood pressure affects 22.5% of the population over 18 years (22.8% males and 22.1% females), while obesity affects 2.2% of the population (1.4% males and 3.0% females) (8). Only eight of the 11 essential medicines for treatment of noncommunicable diseases are available in the public health sector.¹

The rising burden of noncommunicable diseases is fuelled by an increase in life expectancy at birth, ongoing socioeconomic and demographic transition, and a growing prevalence of risk factors for noncommunicable diseases. There is limited public awareness regarding these diseases and care is mainly provided through non-state actors, as such no formal assessment has been carried out to assess the quality of care provided. The country has no guidelines for the prevention and control of the most common noncommunicable diseases and their related risk factors. Health workers are not trained on noncommunicable diseases management in primary care and the role of the successive levels of care and referral procedures have not been identified in relation to care of noncommunicable diseases. Only limited tests and procedures are available for early detection, diagnosis and monitoring at the primary health care level.

¹ WHO Regional Office for the Eastern Mediterranean, unpublished data, 2013.
Priority is being given to the development of a national strategic control plan and a surveillance system for risk factors. A national action plan for tobacco control is also being developed as well as awareness-raising campaigns on noncommunicable diseases.

**Mental health and substance abuse**

Neuropsychiatric disorders are estimated to contribute to 6.7% of the burden of disease (11) and the suicide rate is estimated at 5.7 deaths per 100 000 population per year (12). The annual prevalence rate of cannabis use is estimated at 4.3%, opiates 2.7%, cocaine 0.1%, and amphetamines 0.1%, and the estimated prevalence of substance use disorders among adults (15 years and over) is 0.9% for men and 0.1% for women (13).

Limited services are available for both mental health and substance use; this is compounded by widely pervasive stigma and financial, human, infrastructural and information resource constraints which present major challenges for accessible and acceptable mental health care service delivery. Mental health is considered a priority within the national strategy for the prevention and control of noncommunicable diseases.

Focus is needed on key priorities with the objective of narrowing the treatment gap. These priorities include promoting mental health literacy, developing community-based services, integrating mental health into general health care and developing an appropriate legislative and policy framework.

**Violence and injury**

The percentage of deaths caused by injuries in 2012 was 17.4%. Of this, unintentional injuries accounted for 53.8% (27.6% due to road traffic injuries, 13.9% as a result of drowning) and intentional injuries accounted for 46.2% (74.2% collective violence and legal intervention, 19.8% interpersonal violence) (8). In 2010, the estimated road traffic fatality rate was 19.8 per 100 000 population (14). For post-injury trauma care, there is a universal emergency access telephone number; however, fewer than 11.0% of seriously injured people are transferred by ambulance (14).

There is no specialized national emergency care training offered for medical doctors or nurses. Among all road safety risk factors, existing laws only address speeding and drink driving. Challenges include the unstable security situation, lack of local/national resources, inadequate information systems, inadequate legislation and sociocultural factors related to domestic violence.

There is a need for more comprehensive legislation and for strengthening the injury information system. The national health and nutrition policy (2012–2020) includes road safety as a public health issue, which is an opportunity for strengthening prevention and
response. Violence prevention and control needs to be scaled up based on structured and culturally accepted approaches.

**Disabilities and rehabilitation**

The prevalence of disability is 2.7 and is higher among males (3.1%) than females (2.3%) (15). Prevalence is highest in the age group of 10–19 years (23.5%) and lowest among those aged 50–59 years (8.0%) (2012). Of the types of disability, 36.5% are physical, 25.5% are visual, 18.8% are intellectual and 9.7% are mental (15). Multiple disabilities constitute 9.4% of all disabilities (15).

The Convention on the Rights of Persons with Disabilities has not been signed or ratified. The Ministry of Labour, Social Affairs, Martyrs and Disabled is the national coordination body. Physical rehabilitation services within both the basic package of health services and essential package of hospital services are provided in 21 out of 34 provinces (62.0%). Most services for people with disabilities are provided by international and national nongovernmental organizations. Challenges include the unstable security situation, inadequate information system, and lack of local/national resources (human and financial) resulting in reliance on external resources. There is a shortage of trained human resources in eye care cadres at all levels. There is a need to integrate disability in all components of disaster risk reduction and develop a disability and rehabilitation action plan based on WHO guidelines that includes: inclusive health care, rehabilitation, surveillance, coordination with major actors within and outside the government and reorienting health care providers on accessibility in rural and remote areas.

**Nutrition**

The prevalence of various conditions of malnutrition in children under 5 years is as follows: 32.9% underweight, 8.6% wasting, 3.5% severe wasting, 59.3% stunting, 4.6% overweight (16). The estimated prevalence of anaemia in women of reproductive age (15–49 years) is 40.4%. Iodine deficiency affects 20.4% of the population (17). Initiation of breastfeeding within one hour after birth is 53.6%, while more than half (54.3%) of the children age 0–5 months are exclusively breastfed (17); low birth weight is 6.0%. An effective comprehensive multisectoral approach towards nutrition is lacking. Inadequate infant feeding and caring practices are a cause of malnutrition, combined with widespread poverty, lack of access to food, and poor diet. Food safety and hygiene also pose a challenge.

Focus is needed on the following initiatives: intersectoral coordination for the implementation of the nutrition action framework and revision and adaptation of policies, protocols/guidelines and training modules to ensure improved quality of services; nationwide expansion of the nutrition surveillance system; growth monitoring practices in at least 20 provinces and expansion of infant and young child feeding programmes capacity-building of health personnel for provision of quality services; improvement in monitoring and evaluation of the quality of services at public health facilities; strengthening the operational capacity of existing therapeutic feeding units, and establishing new therapeutic feeding units in remaining district hospitals.
Promoting health across the life course

Reproductive, maternal, newborn, child and adolescent health

Ageing and health

Gender, equity and human rights mainstreaming

Social determinants of health

Health and the environment
Promoting health across the life course

- The Ministry of Public Health and partners developed a basic package of health services and essential package of hospital services.
- Counteracting gender-based violence is an integral part of both the basic package of health services and essential package of hospital services.

Reproductive, maternal, newborn, child and adolescent health

The maternal mortality ratio declined by 70.4% between 1990 and 2015 (from 1340 to 396 per 100 000 live births) (18) and the under-5 mortality rate decreased by 49.7% (from 181 to 91 deaths per 1000 live births) (19). The leading causes of maternal mortality are postpartum haemorrhage, eclampsia and sepsis; for under-5 mortality they are acute respiratory infection (20.0%), diarrhoea (14.0%), prematurity (13.0%) and intrapartum-related complications (11.0%) (20). The proportion of women receiving antenatal care coverage (at least one visit) is 47.9% and at least four visits is 14.6% (20). The contraceptive prevalence rate is 22.0% (20).

This reduction in maternal mortality is consistent with changes in key determinants of mortality such as raising the age of first marriage and expanding contraceptive use; improving immunization coverage; scaling up antenatal, postnatal and delivery care; using more community health workers and midwives; and increasing access to the basic package of health services. The main challenges impeding further reduction in maternal and child mortality are insecurity and maldistribution of human resources in the health sector; inequitable access to care; low quality of reproductive, maternal, newborn and child health interventions; limited capacity in planning, management and evaluation; and limited access to improved drinking-water and sanitation. In addition, donors have shifted their focus, resulting in a shortage of funds.

Priority needs are to support delivery of quality reproductive, maternal, newborn and child health services; conduct training to improve managerial skills and ensure availability of lifesaving medicines, commodities and equipment; ensure equitable distribution of human resources with community outreach; target evidence-based, cost-effective and community-
based interventions that promote education and mobilization; encourage supportive supervision, monitoring and evaluation; and align and harmonize donor interventions.

Ageing and health

Life expectancy at birth rose by 22.4% between 1990 and 2012 (from 49 years to 60 years) (20). In 2010, the ageing population, over 60 years, represented 3.7%, having grown 192.7% since 1990 (21).

Since 2010, there have been no activities identified to strengthen the health of the elderly in collaborative programmes. No clear national policies, strategies or plans of action have been developed for ageing populations and there are no major activities conducted related to ageing and health. The Ministry of Public Health is currently exploring options for possible future activities.

A rapid situation analyses covering demographic, socioeconomic and health aspects is needed to identify gaps, challenges and the needs of the ageing. This should be used for improved planning to address the demographic shift as the population over 65 years of age increases.

Gender, equity and human rights mainstreaming

The country falls among the 20 lowest human development countries, ranking 149th among 152 countries in terms of gender inequality (22). Female adult (above 15 years of age) literacy is low, 17.6% in 2011 (23), and female participation in the labour force is also low, at 15.7% (22).

Cultural barriers restrict free movement and decision-making choices of women in relation to health and have also limited the number of trained female health care workers. Notable progress has been made in establishing a coherent framework to eliminate gender inequality and social exclusion; a Ministry of Women's Affairs was established in 2002 and the Convention on Elimination of All Forms of Discrimination against Women was ratified in 2003. However, challenges continue in implementation of policies on human rights, gender equality and equity in health care. A key activity that took place over the past two years was the development of a gender-based violence protocol for health care providers in the Ministry of Public Health, with subsequent development of training modules and their implementation in six provinces in the country. A collaborative assessment of gender sensitive health care provision was also done.

Priority needs are to strengthen the health care response to gender-based violence and to develop gender-responsive health services for women in primary health care. There is a need
for a greater number of female health care workers and development of a more conducive environment for their work.

## Social determinants of health

The *Human development report 2014* ranked the country 169th out of 187 countries across the world on the human development index (22). The population at poverty level was 35.8% in 2011 (24). The urban population increased from 18.3% to 25.5% between 1990 and 2012 while access to improved water sources for rural populations increased from 2.8% to 56.1% (24). In 2010, the age group of 0–24 years was 68.0% of the total population (21). The literacy rate in 2012 was 27.0% for adults (25) and unemployment is 8.6% and 19.5% for young people age 15–24 years (24).

Challenges include inequitable access to health care services between rural and urban areas; maldistribution of health care providers at the provincial level and rural and urban areas; widespread poverty; social inequalities that negatively impact the disadvantaged and most vulnerable populations, especially women; and cultural and geographical isolation of women.

There is a need to advocate for prioritization of social determinants in health planning with practical actions for their operationalization in existing health programmes.

## Health and the environment

The percentage of disability-adjusted life years attributable to the environment is 33.0% and total environmental attributable deaths was 176 833 (26). Access to improved sanitation facilities is 29.0% and while access to improved drinking-water is 64.0% (20) resulting in 9867.4 deaths in 2012 due to inadequate provision (27). It is estimated that 81.3% of the population uses solid fuels (biomass for cooking, heating and other usages) (28), resulting in 54 000 deaths per year as a result of indoor pollution (29).

Traditional environmental risk factors are contributing heavily to prevalence of both communicable diseases and noncommunicable diseases. Indoor air pollution is posing a serious risk to health and outdoor air pollution is not adequately monitored. Satellite data and global models show high levels of particulate matter concentration in the environment.

It is essential that a collaborative multi-agency approach is adopted, emphasizing the leadership of the public health sector in terms of governance and surveillance responsibilities, as well as advocacy and motivation of other specialized environmental health service agencies. A national environmental health framework for action will be developed in 2015–2016 based on the regional strategy on health and the environment 2014–2019 and its framework of action.
Health systems

National health policies, strategies and plans

Integrated people-centred health services

Access to medicines and health technologies

Health systems, information and evidence
Health profile 2015

Health systems

- A health financing policy (2012–2020) is in place and includes the introduction social health insurance as a means to mobilize additional funds for health and improve the level of financial risk protection.

- The introduction of community midwives and community health workers, in addition to community nurses, has increased access to health services.

- The health management information system has been computerized. There are systematic methods in place for data quality checks at the dedicated unit in the Ministry, as well as for data analysis and use. In the past five years, the country has conducted a number of well-coordinated surveys.

National health policies, strategies and plans

The national health and nutrition policy 2012–2020 translates the Ministry of Public Health’s vision into 10 strategic directions. These strategies target the areas of nutrition, human resources, access to quality services, good governance, improved health financing, enhancing evidence-based policies, improved regulation and standardization of private sector, community empowerment, promoting a healthy environment and increasing access to health technology and medicines. Total expenditure on health per capita at international exchange rate increased from US$ 23.3 to US$ 55.0 between 2005 and 2013. General government expenditure on health increased during the same period from US$ 2.1 to US$11.7 (30). General government expenditure on health as a percentage of total expenditure on health also increased by for the same period (from 9.2% to 21.2%); however, total expenditure on health as a percentage of the gross domestic product decreased by from 8.8% to 8.1% for the same period (30). In addition, the health financing system is characterized by a high share of out-of-pocket spending, 78.8% in 2013 (30). Total expenditure on health from external sources increased for the same period from 12.1% to 18.6% (30).

With concern about the sustainability of external support for health, consideration is being given to exploring alternative health financing approaches based on domestic resources. A health financing policy (2012–2020) is in place and includes the introduction social health insurance as a means to mobilize additional funds for health and improve the level of financial risk protection. Strong national capacity has helped generate the evidence needed to inform a health financing strategy to pursue universal health coverage. Despite improvements in health outcomes over the past decade, the health system still faces a number of challenges that are summarized by weak coordination and widespread political influence and donor-financed projects.
There is a need to integrate universal health coverage into the national health and nutrition policy and the strategic plan. While the importance of social determinants of health is underlined in the strategic plan, there is a need to implement interventions addressing inequities in health outcomes. The significant stewardship role of the Ministry of Public Health at the central level should also be reflected at the level of the provinces.

**Integrated people-centred health services**

Health service delivery was strengthened between 2010 and 2013 as the density of health posts increased from 2.87 to 2.95 per 100 000 population (31). In 2013 hospital density was 0.37 per 100 000 population, 0.1 for provincial hospitals, and 0.09 for specialized hospitals (31). The number of hospital beds per 10 000 population was 4.0 in 2010 (31). Between 2005 and 2011 the density of human resources for health increased for physicians from 2.0 to 2.3 per 10 000 population, stayed constant for nurses and midwives (5.0 per 10 000 population), decreased for dentists from 0.3 to 0.03 per 10 000 population and increased for pharmacists from 0.3 to 0.6 per 10 000 population (33). The density of psychiatrists working in the mental health sector in 2011 was 0.16 per 100 000 population (32).

Since 2007, little improvement has been made in the management and the quantity and quality of the services provided. The introduction of community midwives and community health workers, in addition to community nurses, has increased access to health services. However, there is still need for many more female health workers, particularly in rural and remote areas. Health service delivery is supported through mobile clinics in remote areas and in areas affected by disasters. There are eight medical schools, and a number of institutes to train allied health workers. Some private mid-level training centres have recently been established.

**Access to medicines and health technologies**

Both the quantity and quality of essential medicines are major challenges for the health system. As there is no national regulatory authority, medicines, vaccines, biological agents, laboratory agents and medical devices are not properly regulated, making legislation and law enforcement almost impossible. The function of the regulatory body is fragmented among different government entities, including the General Directorate of Pharmaceutical Affairs, Quality Control Laboratory and Health Legislation Department. Traditional medicine is widely utilized as it is less expensive and more readily accessible.

The Ministry of Public Health is planning to assess the potential adverse effects of traditional medicines and produce technical guidelines, as well as establish mechanisms to control their use. In addition, the national quality control system for pharmaceuticals needs to be upgraded to assess the quality of medicines and ensure community access to quality, affordable and safe medicines.
Health systems, information and evidence

The country receives external technical support from bilateral and multilateral donors and the continuation of technical support for the health management information system is still needed, especially in management of routine information systems. There is inadequate infrastructure, even at provincial level, in terms of registers and paper in the facilities, as well as computers and broadband connectivity. The health management information system has been computerized. There are systematic methods in place for data quality checks at the dedicated unit in the ministry, as well as for data analysis and use. In the past five years, the country has conducted a number of well-coordinated surveys.

Addressing the problem of extreme fragmentation of the health information system is a key priority and the Ministry of Public Health is in the process of building its own data warehouse. The strategic priorities include transitioning to a web-based data warehouse which enables central storage and dissemination of data; developing stronger mechanisms of sustainability and country ownership; including courses on health information system within the national curriculum of medical and public health programmes; and strengthening systems of vital registration.
Preparedness, surveillance and response

Alert and response capacities

Epidemic and pandemic-prone diseases

Emergency risk and crisis management

Food safety

Poliomyelitis eradication

Outbreak and crisis response
Preparedness, surveillance and response

• A review of the national plan for emergency preparedness and response focusing on enhanced preparedness of facility-based services for communities in high-risk areas has been completed.

• All relevant directorates are working closely in collaboration with other sectors and global partners to strengthen the surveillance and response system to better respond to emergencies.

• The polio programme has been maintained through difficult and challenging times, carrying out national immunization campaigns and surveillance.

Alert and response capacities

The country has requested a second extension for meeting IHR obligations by June 2016 due to the ongoing conflict situation. In the IHR 2013 self-assessment questionnaire, the implementation scores ranged from a zero for legislation and for managing chemical events to 75 for surveillance. The existing health cluster mechanism operates as control centre that coordinates and monitor disease outbreaks and other public health emergencies. The Central Public Health Laboratory has been recognized as a national influenza centre since 2009. It has the capacity to perform laboratory testing for priority public health events. Efforts are also under way to strengthen laboratory capacity at regional and provincial level. Points of entry have been assessed and a plan is being developed for strengthening their surveillance and response capacity. The Ministry of Public Health and the Ministry of Agriculture, Irrigation and Livestock have signed an agreement for coordinated surveillance and response for zoonosis. National and provincial level zoonotic disease taskforces have been established. A coordination mechanism been established between the food safety authorities and the national IHR focal point. National policies and plans have been established for the detection, assessment and response to radiation emergencies.

Though the situation has stabilized in recent years, significant gaps in infrastructure, human resources, human development, education and health still remain in the wake of widespread destruction, massive displacement and a fragmented recovery. Further support is needed to enhance national capacities for legislation and preparedness and response to public health events, particularly biological, chemical and food safety events including at points of entry (34).
Epidemic and pandemic-prone diseases

The country is prone to frequent outbreaks of infectious diseases. The control programme for epidemic-prone diseases is weak and fragmented, and the security situation in the country, geographic inaccessibility and continuous population movement across porous borders make programmes for prevention and control of emerging infectious diseases in the country difficult to implement and sustain. The disease warning surveillance system remains the key surveillance system in the country for early detection of acute emerging health threats. Owing to repeated threats from emerging infections, the national public health capacity of the country for prevention, early detection and rapid response to emerging health threats has improved significantly.

As the country transitions from a disease warning surveillance system to an integrated disease surveillance and response system, a key challenge is to sustain the progress and achievements made in detection, prevention and response to epidemics of emerging infections. Epidemiological and laboratory surveillance capacities at the peripheral level need to be strengthened by linking them with enhanced capacity at the local level for informed decision-making on prevention and control of emerging health threats.

Emergency risk and crisis management

The country is susceptible to both natural and man-made disasters that cause significant loss of lives, livelihoods and infrastructure, reversing development gains. Data from 1994–2013 show that annual losses attributable to natural disasters, on average, include 239.4 deaths, or 0.9 deaths per 100 000 inhabitants, and amount to US$ 153.4 million in purchasing power parity and 0.4% of gross domestic product (35).

Considering the regular occurrence of different hazards exposing the population to higher risks from disasters, the government has implemented an initiative to scale up national emergency preparedness and response and establish a national programme on epidemic and pandemic alert and response. An all-hazard/whole-health and multisectoral approach has been adopted for national health system disaster management planning with emphasis on mass casualty management in high-risk provinces. Contingency plans for possible floods (which occur annually) and epidemics are being prepared and implemented together with the national health authorities and health partners. The country has also prioritized optimum functionality of health facilities and initiated assessments of health facilities in 14 high-risk provinces.

There is a need to scale up the efficiency of the health sector’s capacity for emergency preparedness and response by studying lessons from different emergencies and applying them through recovery actions. The country needs to strengthen its national capacity,
involving all key stakeholders to ensure the safety and functionality of health facilities, and a skilled health workforce as priorities to save lives and reduce health risks in any disaster.

Food safety

There is no competent food authority to regulate food products. Food legislation is under development, and will establish a legal basis to control the supply, manufacture, processing, storage, transportation, sale, import and export of food, as well as to guarantee its safety. Food is imported without any formal registration and licensing system. There is a national food and medicine quality control laboratory that can perform simple chemical quality control tests for foodstuffs, but not biological and toxicological tests. Furthermore, coordination is weak between the Ministry of Public Health and Ministry of Agriculture, Irrigation and Livestock in regulating foodstuffs in the market. The country’s low capacity in food safety and food regulation issues is another challenge. Codex Alimentarius standards are not applied, and there is no national Codex committee. Although there are many cases of foodborne diseases, there is no surveillance mechanism to detect and report the events, as a result of inadequate laboratory capacity to test food samples, limited food inspection and lack of food regulation. Food produced and consumed locally is not inspected, and most restaurants do not practise good food hygiene.

As legislation is in process, there are requirements for food inspectors and food laboratory technicians, as well as food epidemiologists to be identified within the Ministry of Public Health.

Poliomyelitis eradication

The country is one of three remaining polio-endemic countries in the world. It has made steady progress towards stopping the transmission of wild poliovirus reflected by restricting endemic poliovirus circulation to limited areas in the south and preventing large outbreaks despite repeated re-introduction of polioviruses from Pakistan. The country reported 28 cases of poliomyelitis in 2014 and one case as of date in 2015 (36). The Expert Review Committee identified six polio-compatible cases in 2014, cases that looked like polio clinically but could not be confirmed by the laboratory due to inadequate stool samples. A total of 2418 cases of acute flaccid paralysis were reported in 2014 and 241 cases of acute flaccid paralysis reported (36).

Although the acute flaccid paralysis rate indicates that the system for detection of cases is sensitive, the isolation of an orphan poliovirus late in 2014 in the southern region indicates weaknesses in the sensitivity of the surveillance system in the south. The main challenge in the country is insecurity and inaccessibility to some areas in the southern part of the country. In autumn 2014 inactivated polio vaccine was piloted in low-performing districts
and continues to be piloted successfully in 2015. Efforts have been intensified during the low transmission season to interrupt poliovirus circulation by the end of 2015. A robust national emergency action plan has been updated and the planned activities are being implemented. The programme has also put in place a human resource surge plan and is filling the positions as rapidly and as thoroughly as possible.

Comprehensive implementation of the national emergency action plan to reach all the children everywhere in the country, particularly in the south, with a strong mechanism to track and vaccinate repeatedly missed children is crucial to interrupt poliovirus transmission in the country.

**Outbreak and crisis response**

The country has been in protracted conflict for 35 years. This situation continues to elevate humanitarian needs and interrupt even basic health services in the most security-affected areas. The disruption of health services with closure of health facilities and suspension of outreach health services in affected areas have severely compromised access to essential health care. In 2013, the number of people without access to health services increased from 3.3 to 5.4 million (37) and 7965 deaths and injuries related to the ongoing conflict were reported between January and September 2014, 22.0% of which were among children (38). In 2014, 28.0% of the population (8 million people) faced food insecurity (38).

Coverage of essential vaccinations continues to be low in high-risk provinces and there is potential for a large-scale outbreak of vaccine-preventable diseases. Outbreaks of communicable diseases result in high case-fatality rates. In spite of significant progress in strengthening surveillance and response mechanisms, outbreak preparedness and response continues to rely mostly on external support. In late 2014, the government began scaling up its preparedness for Ebola virus disease by assessing its level of preparedness and readiness using the assessment checklist developed by WHO and identifying critical gaps for improvement. Although the current capacity of the emergency preparedness and response unit in the Ministry of Public Health is weak owing to inadequate funding, the Ministry provides leadership and oversight during emergencies in order to: control communicable diseases and maintain continuity of delivery of critical services for emergency patients and of essential public health programmes.

Priority needs include adapting strategies for improving access of health care workers and safety of patients, linking action to recovery and development to prepare transition responsibilities, and ensuring necessary resources for foreseen needs.
Demographic profile

Population pyramid 2010

Estimated population in 2010: 28,397,812

Population pyramid 2050

Projected population in 2050: 56,551,242

Total fertility rate

Need for family planning satisfied

Dependency ratio

Life expectancy at birth

Source for all graphs: (21)
Analysis of selected indicators

General government expenditure on health as % of general government expenditure (30)

Out-of-pocket expenditure as % of total health expenditure (30)

DPT3/pentavalent coverage among children under 1 year of age (%) (6)

Measles immunization coverage (%) (6)

Under-5 mortality (per 1000 live births) (19)

Maternal mortality ratio (per 100 000 live births) (18)
References


