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“New diseases are global threats to health that also cause shocks to economies and societies. Defence against these threats enhances our collective security. Communities also need health security. This means provision of the fundamental prerequisites for health: enough food, safe water, shelter, and access to essential health care and medicines. These essential needs must also be met when emergencies or disasters occur.”

Dr Margaret Chan  
Director-General, WHO

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E92119  
Original: English



# Assessment of health security and crises management capacity

## Azerbaijan

Supported by



The European Commission



Directorate-General for  
Health and Consumers

December 2007

# Abstract



“Support to health security and preparedness planning in EU neighbouring countries”, a WHO Regional Office for Europe project supported by the European Commission, Directorate-General for Health and Consumers, has the overall objective of assessing national capacity to respond to public health emergencies and implement the International Health Regulations (IHR), in selected European Neighbourhood Policy (ENP) countries while promoting a multisectoral approach to ensure the interoperability of existing public health emergency plans and their coherence with the EU policies and strategies. After negotiation with the relevant ministries of health, Armenia, Azerbaijan and the Republic of Moldova were selected for assessment.

In November–December 2007, a WHO multidisciplinary team, in cooperation with local counterparts, carried out the assessment in Azerbaijan using a newly-developed standardized assessment tool. The WHO health system framework was used as the conceptual basis for describing and analysing the health system. The report includes the conclusions of the assessment team as regards generic preparedness planning, the IHR, chemical safety and climate change and health in relation to disaster preparedness and response.

## Keywords

Security measures  
Disease outbreaks  
Natural disasters  
Emergencies  
Civil defence  
Azerbaijan

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## Foreword

This report describes the situation in the area of health crisis management in Azerbaijan as of December 2007. A WHO mission to the country completed its work on 8 December 2007, which is therefore the cut-off date for the information in this report and any changes in the situation that have taken place since the mission are not reflected.

The report evaluates the arrangements in place and the level of health system preparedness to any crises, regardless of their cause. It also pays attention to risk prevention and mitigation initiatives in the country. While the emphasis is on the national level, some attention has been paid to crisis management capacities on the regional level and to the linkages between various levels of government.

The preparation process for comprehensive health security assessments in selected Member States of the WHO European Region started in early 2007 with expert consultations to develop and define an assessment tool. The countries to be assessed also needed to belong to the group of countries falling under the so called European Neighbourhood Policy of the European Union.

Azerbaijan fulfils the above mentioned criteria. Both the Ministry of Health and the Ministry of Emergency Situations welcomed the assessment team from the WHO Regional Office for Europe to pilot the newly developed assessment tool in the country. The assessment visit took place from 28 November to 8 December 2007, by a six-member team (Annex 2) representing expertise in the areas of general disaster preparedness and response, chemical safety, health effects of climate change and the International Health Regulations. During the assessment visit, the WHO team met with over 50 representatives from the key institutions involved in crisis management activities in Azerbaijan. The national contributors are acknowledged in Annex 5 of the report.

This health crisis management review in Azerbaijan was carried out thanks to the support from the Ministry of Health and the Ministry of Emergency Situations of Azerbaijan. Particular thanks are also extended to the staff of the WHO country office in Azerbaijan, who supported the preparation and implementation of the mission from its inception, organized the visit, contacted all relevant sectors, provided background information and participated in the interviews.

We acknowledge the grant from the European Commission, Directorate-General for Health and Consumers, which supported both the implementation of this project and the preparation of the report.

Gerald Rockenschaub  
Regional Adviser

Jukka Pukkila  
Desk Officer

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## Terminology

Throughout the document the term “health crisis” refers to the health threats associated with new or newly-emerging diseases, the accidental or deliberate release of biological, chemical or radio nuclear agents, natural disasters, man-made disasters, complex emergencies, conflicts and other events with a potentially catastrophic impact on human health, including climate change.

A “crisis” in this context is defined as a critical situation where health systems are overwhelmed by rapidly increasing service demands and, as a result, are unable to meet the basic health needs of the people affected.

For practical purposes, a “disaster” is referred to as “a serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses, which exceed the ability of the affected community or society to cope using its own resources” (1) and “emergency” as “a sudden occurrence demanding immediate action that may be due to epidemics, to natural, to technological catastrophes, to strife or to other man-made causes” (2).

**NOTE:** This report avoids the word “emergency” in crisis preparedness and response activities involving the Ministry of Health. Emergency has its own special connotation in the medical field e.g. emergency ward, emergency operation, emergency procedures, etc. The word “emergency” is used, therefore, only where it is part of an official title.

## Background

### Context

In recent years, health security in the World Health Organization (WHO) European Region has suffered from the continued and increasing threats of communicable diseases, natural hazards, large-scale accidents, conflicts, complex emergencies and the effects of climate change. Avian influenza and the threat of a human influenza pandemic, the heat-wave of 2003, widespread flooding in 2007 and political instability in parts of the European Region, have served to highlight the need for countries to ensure that policies and procedures are in place to prevent or respond adequately to a wide range of crisis situations that threaten health security.

The development of policies and plans for health systems preparedness for and response to crises in the Region is further driven by two key factors:

- (1) the revised International Health Regulations (IHR) (3) that came into effect on 15 June 2007;
- (2) the body of European Union (EU) legislation on communicable disease surveillance and response, and environmental health, to which the EU Member States must comply.

In 2004, the EU offered neighbouring countries a privileged relationship, building on a mutual commitment to common values, such as democracy and human rights, rule of law, good governance, market economy principles and sustainable development. This policy is referred to as the European Neighbourhood Policy (ENP) and is distinct from the accession process in that it applies to those countries that border with EU countries by land or sea. The ENP countries in the Region are Armenia, Azerbaijan, Belarus, Georgia, Israel, Moldova and Ukraine. Signatories of the ENP are bound by an agreed action plan that sets out an agenda of political and economic reforms with short- and medium-term priorities, including the harmonization of relevant legislation, for example legislation related to communicable disease surveillance and response and environmental health legislation.

The revised IHR have a broader scope than the previous version that focused solely on the notification of three communicable diseases. States Parties to the IHR are now obliged to notify WHO of any health event of potential international public health concern, irrespective of its cause (for example, whether it is biological, chemical or radio-nuclear) and origin (whether accidental or deliberate), and to respond accordingly. The international public health implications of any given event are assessed on the basis of the criteria detailed in the algorithm presented in Annex 2 of the IHR. These include questions, such as:

- Is the impact of the event on public health serious?
- Is the event unusual or unexpected?
- Is there a significant risk of international spread?
- Is there a significant risk of international travel or trade restrictions?

Furthermore, States Parties are requested, by June 2009, to assess their structures and resources with a view to meeting the minimum core capacity required for implementing the IHR, as detailed in Annex 1 of the IHR. The required minimum core capacity relates to public health surveillance and response at community, regional, and national levels, and designated points of entry (i.e. airports, ports and ground crossings).

### **Standardized assessment tool**

To strengthen national health crisis preparedness and response, the WHO Regional Office for Europe is developing an assessment tool for evaluating priority health risks, the status of generic preparedness plans and the interoperability of public health crises plans in selected countries. Because of the work of the European Commission (EC), the European Centre for Disease Prevention and Control and WHO, a broad knowledge and sound understanding of the EU Member States' health preparedness capacity already exist. However, this is not the case with respect to ENP countries.

This initiative is therefore being implemented with the support of the European Union as part of the ENP and funded through the European Public Health Alliance and the DG SANCO<sup>1</sup> budget. The EU recognizes that the initiative will contribute to improving the capacity of ENP countries to respond to public health crises through strengthened planning and response to the health consequences of a wide variety of risks.

A working group of national and international experts is developing the assessment protocols, which are being tested and evaluated in three ENP countries, Armenia, Azerbaijan and Moldova. The results of the assessment will be shared with the relevant countries and used as a baseline for strengthening national preparedness and response plans, with WHO support where required.

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<sup>1</sup>Directorate-General for Health and Consumers – <http://www.eph.org/r/64>, accessed on 16 July 2008.



## **Goal and objectives**

The goal in assessing the capacity of health system crisis preparedness in Azerbaijan is to minimize the impact of future crises on health by determining and closing the gaps in the resilience of the health system to respond to all threats. More specifically, the objectives of the assessment are to:

1. support the Ministry of Health of Azerbaijan by: identifying the strengths, weaknesses and gaps in the current health system crisis preparedness and response plans; developing a framework for strengthening country capacity; and strengthening health security, which includes developing an IHR implementation plan.
2. develop a flexible tool for the assessment of country capacity for crisis preparedness and response with special reference to:
  - the legal framework and institutional arrangements that exist in the country for the prevention and mitigation of, the preparedness for, and the response to potential health system crises;
  - the provisions of the revised IHR;
  - the capacity in the country to deal with a health system crisis caused by the release of chemical substances, be it accidental or intentional;
  - the capacity in the country to deal with emerging threats from climate change, such as morbidity and mortality from heat and heat-waves, floods, windstorms and communicable diseases;
  - the threat of avian influenza and pandemic influenza.
3. to share the results of the assessment with the Government and the United Nations agencies, donor organizations and national and international nongovernmental organizations (NGOs) involved in crisis preparedness and response in Azerbaijan.

## **Expected outputs**

- A comprehensive report highlighting the strengths and weaknesses of and the gaps in the present planning framework of the Ministry of Health for crisis preparedness and response in Azerbaijan.
- Recommendations on and an implementation framework for strengthening the crisis preparedness and response system in Azerbaijan over the next 3–5 years, indicating any technical support that may be required.
- Recommendations for developing an IHR implementation plan.
- A revision of the health system preparedness and response assessment tool that will be further piloted in another ENP country.

## Country overview

Fig. 1. Map of Azerbaijan



Source: Map No. 3761, Rev. 7, United Nations, Department of Field Support, Cartographic Section, Rev. 7, February 2008

Official name:	The Republic of Azerbaijan
Capital city:	Baku
Main languages:	Azeri and Russian
Main religion:	Islam
Monetary unit:	1 manat = 100 qapiks

## Geography

**Table 1. Geographical area of Azerbaijan**

Area	2000	2005	2006
Surface area (square km)	86 600	86 600	86 600
Forest area (square km)	9 360	9 360	- <sup>a</sup>
Agricultural land (% of land area)	57.4	57.6	- <sup>a</sup>

<sup>a</sup> No data available.

Source: The World Bank Group, *World Development Indicators, 2007* (<http://ddp-ext.worldbank.org/ext/DDPQQ/member.do?method=getMembers&userid=1&queryId=135>).

Azerbaijan borders with the Russian Federation (Republic of Dagestan) to the north, Armenia and Georgia to the north-west, the Islamic Republic of Iran and Turkey to the south and the Caspian Sea to the east. Its area of 86 600 square kilometres is divided into two parts, with the Autonomous Republic of Nakhchivan (Azerbaijan) separated from the main part of Azerbaijan by Armenian territory. Sixty percent of the terrain is mountainous. The climate in most places is dry and 70% of the cultivated land is irrigated.

## History

Azerbaijan has been the site of many conflicts involving Arabs, Kazars, and Turks. After the 11th century, the territory was dominated by the Turks, becoming a stronghold of the Shiite Muslims. The territory was acquired by Russia from Persia through the Treaty of Gulistan in 1813 and the Treaty of Turkamanchai in 1828.

After the Bolshevik Revolution, Azerbaijan declared independence from Russia in May 1918. The Republic was re-conquered by the Red Army in 1920 and annexed to the Transcaucasian Soviet Socialist Republic in 1922. It was later re-established as a separate Republic of the former Soviet Union on 5 December 1936. Azerbaijan declared independence from the former Soviet Union on 30 August 1991.

## Government

Azerbaijan is a presidential republic. Its government is regulated through a division of power into executive, legislative and judicial branches. The self-governing municipalities hold a special place in the political system of Azerbaijan.

The President<sup>2</sup> is elected for a five-year term and appoints the Prime Minister<sup>3</sup>, other members of the Government, and the heads of local government bodies in the cities and

<sup>2</sup> Mr Ilham Aliyev, Head of the Executive Branch, at the time of the assessment.

<sup>3</sup> Mr Artur Rasizade at the time of the assessment.

the 66 administrative districts (*rayons*). These appointments require the approval of the legislative branch, the Parliament (of which there are 125 members), or the National Assembly (Milli Mejlis).

The Supreme Court is separate and is the highest level of the judicial branch. The ministries in the social sector, such as those for health, education, and social protection, are directly subordinate to the Prime Minister. Legislative changes require presidential approval.

## Administrative levels

Azerbaijan has the following administrative divisions:

- 10 economic regions subdivided into 66 districts (*rayonlar*; singular: *rayon*) and eight cities (*saharlar*; singular: *sahar*);
- the Autonomous Republic of Nakhchivan (Azerbaijan), which is subdivided into seven districts and one city.

## Population

**Table 2. Population of Azerbaijan**

Population	2000	2005	2006
Total (in millions)	8.0	8.4	8.5
Annual growth (%)	0.8	1.0	1.0

Source: The World Bank Group, *World Development Indicators, 2007* (<http://ddp-ext.worldbank.org/ext/DDPQQ/member.do?method=getMembers&userid=1&queryId=135>).

In 2007, the population of Azerbaijan was estimated at about 8 593 000. However, this estimate is imprecise because of the displacement of the population resulting from the war with Armenia and the occupation of almost 20% of the national territory by the Armenian forces.

## Economy

**Table 3: Overview of economy of Azerbaijan**

Indicators	2000	2005	2006
Gross national income (GNI), Atlas method (current US\$)	4.9 billion	10.6	15.7
GNI per capita, Atlas method (US\$)	610.0	1270.0	1850.0
Gross domestic product (GD) (US\$)	5.3	13.2	20.1
GDP growth (annual %)	11.1	26.4	34.5
Inflation, GDP deflator (annual %)	12.5	16.1	5.3
Foreign direct investment, net inflows (Balance of Payments, US\$)	129.9 million	1.7 billion	- <sup>a</sup>
Long-term debt (Disbursed and outstanding debt, US\$)	860.0 million	1.5 billion	- <sup>a</sup>
Official development assistance and official aid (US\$)	139.1 million	223.4 million	- <sup>a</sup>

<sup>a</sup> No data available.

Source: The World Bank Group. *World Development Indicators, 2007* (<http://ddp-ext.worldbank.org/ext/DDPQQ/member.do?method=getMembers&userid=1&queryId=135>).

Azerbaijan is the birthplace of the modern oil industry and its economy is still largely based on the petrochemical industry. The agricultural sector produces cotton and grapes, mainly for export, and wheat, vegetables, tea and tobacco for internal consumption. The Government of Azerbaijan has signed production share agreements worth several billions of dollars with international oil companies. Azerbaijan's pro-western stance and economic management make it the most attractive of the oil-rich Caspian countries for foreign investment.

Following independence, the country has undergone rapid privatization and received high marks from the International Monetary Fund (IMF) for one of the most successful economic overhauls ever. However, the critics say that the economy as a whole has not benefitted from the oil revenues as much as it could have done.

In July 2006, the 1768 km long Baku-Tbilisi-Ceyhan pipeline (a route from Azerbaijan through Georgia to Turkey) was officially opened. This pipeline carries crude oil from the Azeri-Chirag-Guneshli oil field in the Caspian Sea to the Mediterranean Sea. Major investors are BP (United Kingdom of Great Britain and Northern Ireland) (33%), the State Oil Company of Azerbaijan (SOCAR) (25%), Unocal Corporation (United States of America) (8.9%), and Statoil (Norway) (8.7%).

At the beginning of 2007, the 692 kilometres long South Caucasus Pipeline was officially opened. It was designed to transport gas from the Shah Deniz field in the Azerbaijan sector of the Caspian Sea, through Georgia and on to the Georgia-Turkey border. The South Caucasus Pipeline was constructed in the same corridor as the Baku-Tbilisi-Ceyhan pipeline.

## Environment

**Table 4. Environmental factors, Azerbaijan**

Indicators	2000	2005	2006
CO <sup>2</sup> emissions (metric tons per capita)	3.7	- <sup>a</sup>	- <sup>a</sup>
Access to water source (% of population)	75	- <sup>a</sup>	- <sup>a</sup>
Access to health facilities (% of urban population)	73	- <sup>a</sup>	- <sup>a</sup>
Energy consumption (per capita kg of oil equivalent)	1430.3	- <sup>a</sup>	- <sup>a</sup>
Import of energy, net (% of energy use)	-64.7	- <sup>a</sup>	- <sup>a</sup>
Consumption of electrical power (kWh per capita)	2040.5	- <sup>a</sup>	- <sup>a</sup>

<sup>a</sup> No data available.

Source: The World Bank Group, *World Development Indicators*, 2007 (<http://ddp-ext.worldbank.org/ext/DDPQQ/member.do?method=getMembers&userid=1&queryId=135>).

A century of oil production and environmental neglect has left much of the environment in Azerbaijan in a dismal state. Pollution from the extraction, refinement and transit of oil and gas has severely degraded the quality of the water, air and soil. The most affected areas are located around the Absheron Peninsula and Sumqayit. The Caspian and inland waterways also suffer from chemical contamination caused by agricultural run-off and industrial toxic waste. These factors have had a highly detrimental effect on public health and the availability of safe drinking water.

## Health System

**Table 5. Health indicators, Azerbaijan**

Indicators	2000	2005	2006
Life expectancy at birth (total, years)	71.8	72.3	- <sup>a</sup>
Fertility rate (total no. of births per woman)	2.1	2.3	- <sup>a</sup>
Births attended by skilled health staff (% of total)	84.1	- <sup>a</sup>	- <sup>a</sup>
Prevalence of malnutrition according to weight for age (% of children under 5 years)	16.8	- <sup>a</sup>	- <sup>a</sup>
Coverage of measles immunization (% of children aged 12–23 months)	99.0	98.0	- <sup>a</sup>
Prevalence of HIV, total (% of population aged 15–49 years)	- <sup>a</sup>	0.1	- <sup>a</sup>

<sup>a</sup> No data available.

Source: *The World Bank Group, World Development Indicators, 2007* (<http://ddp-ext.worldbank.org/ext/DDPQQ/member.do?method=getMembers&userid=1&queryId=135>).

Until Azerbaijan became independent, the policies of the Ministry of Health were created as part of a centrally-organized hierarchical structure. The strengths of the health system of the former Soviet Union were a wide coverage of the population, expanded programmes of immunization, the availability of healthcare facilities even in the smallest villages and remote areas, an emphasis on free care with strong governmental support (subsidies) for drugs, and highly specialized health services.

The collapse of the system of the former Soviet Union and the conflict with neighbouring Armenia placed a huge strain on the health system. As a result, the country experienced outbreaks of diseases that had earlier been under control, including diphtheria, malaria and polio. Other diseases, such as tuberculosis (TB), increased. The situation was worsened by the disruption of the supply of pharmaceuticals and equipment following the breakdown of trading relations when Azerbaijan became independent. In terms of health, Azerbaijan shares with its Commonwealth of Independent States counterparts a relatively low life expectancy and high rates of noncommunicable diseases.

The Ministry of Health, with funding assistance from the Government of Azerbaijan and the World Bank, is currently undertaking the largest public health reform in its history – the Health System Reform Project. The purpose of the project is to enhance the health system with a view to improving health outcomes.

Ensuring health care for the population is one of the key parts of the new constitution<sup>4</sup>. Article 41 states: “The state takes all necessary measures for development of all forms of health services based on various forms of property, guarantees sanitary-epidemiological safety and creates possibilities for various forms of medical insurance.”

### **Transnational issues**

Azerbaijan and Armenia have feuded over the enclave of Nagorno-Karabakh since 1988 when Nagorno-Karabakh (with a majority population of ethnic Armenians) tried to break away from Azerbaijan and join Armenia. An estimated 30 000 died before a cease-fire agreement was reached in 1994, with Armenia gaining a military hold over the disputed enclave. The final status of Nagorno-Karabakh is yet to be determined.

Over one million mostly ethnic Azerbaijanis have been driven from the occupied territories and from Armenia, and about 200 000 ethnic Armenians have been driven from their homes in Azerbaijan into Armenia. The Organization for Security and Cooperation in Europe is mediating the dispute.

Azerbaijan, Kazakhstan, and the Russian Federation have ratified Caspian seabed delimitation treaties based on equidistance, while the Islamic Republic of Iran continues to insist on an even one-fifth allocation and challenges Azerbaijan’s hydrocarbon exploration in disputed waters. Bilateral talks continue with Turkmenistan on dividing the seabed and the contested oilfields in the middle of the Caspian Sea.

Azerbaijan actively participates in several international and regional projects and initiatives.

The Kars-Tbilisi-Baku railway is aimed at strengthening transportation security within the South Caucasus. The railroad will link the different countries with each other as well as with Europe. The cost of the project is estimated at US\$ 600 million.

The Trans-Caspian Pipeline initiative will allow export of oil from the Kashagan oil field in Kazakhstan through the Baku-Tbilisi-Ceyhan pipeline.

Azerbaijan and Georgia are negotiating the alignment of their boundary at certain crossing points.

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<sup>4</sup> [www.un-az.org/doc/constitution.doc](http://www.un-az.org/doc/constitution.doc), accessed on 12 August 2008.



## **Disaster Profile**

### ***Earthquakes***

Azerbaijan is in a seismic zone and suffers frequently from earthquakes. Among the densely populated parts of the country most prone to seismic activity are the Absheron Peninsula and the North Caspian region. The slopes of the Greater Caucasus Mountains are considered to be the most dangerous. Gandja is in a seismic zone with a risk of earthquakes of force 8–9 (on the Richter scale). The latest earthquake occurred on 25 November 2000 and measured around 6.5 on the Richter scale in Baku; the epicentre of the earthquake was in the Caspian Sea.

### ***Floods***

Heavy rainfall often leads to damaging floods and human casualties. The floods occur mostly along the whole length of the Kura River during the seasonal overflow in spring. A substantial part of the territory of central Azerbaijan could be flooded in case of damage to the Mingechevir water reservoir in the western part of Azerbaijan.

### ***Technological hazards***

Azerbaijan has large-scale heavy chemical industry, concentrated mainly in the city of Sumgait. Moreover, 443 km of the Baku-Tbilisi-Ceyhan pipeline runs through Azerbaijan. It has the capacity to export one million barrels of oil a day and includes two pump stations in Azerbaijan. Another potential technological hazard is the Metsamor nuclear power plant in Armenia, located in the seismic zone close to Azerbaijan.

### ***Epidemiological health threats***

Malaria is endemic in 80% of Azerbaijan territory and the Ministry of Health of Azerbaijan estimates that more than three million people live in the risk zone<sup>5</sup>. The latest large outbreak peaked in 1996 and resulted in 13 135 cases. In 2007, 110 malaria cases were registered. Major bird migration routes pass through Azerbaijan and create the risk of outbreaks of avian influenza. During an outbreak of avian influenza in the first quarter of 2006, 8 laboratory-confirmed human cases of influenza A/H5N1 virus infection occurred in Azerbaijan, 5 of which were fatal. At the same time, 12 human cases occurred in Turkey and resulted in 4 deaths. In total, 20 laboratory-confirmed human A/H5N1 cases occurred in the region, 9 of which were fatal.

The Azerbaijani population of over 16 years of age is not immune to diphtheria. Routine immunization against the disease is carried out in children up to the age of 6 years. A mass diphtheria immunization campaign was conducted for the age group over 55 years in 1995, when the last diphtheria outbreak occurred (with an incidence of 11.5 per

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<sup>5</sup> Source: National malaria elimination strategy for 2008-2013 adopted by the Ministry of Health in March 2008.

100 000). Between 2001 and 2006, no diphtheria cases were registered in Azerbaijan. In 2007, 4 cases of diphtheria were reported. The Ministry of Health plans to conduct a mass immunization campaign against diphtheria among 16-year-old children in 2008 and to include this age group in the national immunization schedule, starting in 2009.

Azerbaijan has three natural sources of plague. The last human case was registered in 1967. Epizootics are registered periodically. Sporadic human cases of anthrax and 350–450 cases of human brucellosis are registered annually.

### ***Landslides***

On 7 March 2000, a major landslide abruptly impacted an area of some 15 hectares in the Bayilov settlement of the Sabayil district, south of Baku city centre.

### ***Drought***

During 2000, Azerbaijan was severely affected by a drought impacting many countries in the Caucasus and in Central Asia. The fisheries sector was severely affected by the low water levels in the rivers and reservoirs caused by the drought. Several generations of fish were lost due to a disruption in breeding patterns.

A complete list of recent disasters impacting Azerbaijan (natural and technological) can be found on the International Disaster Database of the Centre for Research on the Epidemiology of Disasters (4).

## **Methodology**

### **Composition of the assessment team**

Official correspondence between the Ministry of Health and the Ministry of Emergency Situations and the WHO Regional Office for Europe provided the basis for conducting the pilot health security assessment in Azerbaijan. The terms of reference of the mission can be found in Annex 1. The assessment was carried out between 28 November and 8 December 2007 by a multidisciplinary team of six international experts with the required experience in the all-hazard, multisectoral approach (Annex 2). Their areas of expertise covered:

- generic disaster preparedness planning and response, including legal frameworks and institutional arrangements;
- the International Health Regulations;
- communicable diseases surveillance and response;
- environmental health and global warming;
- chemical safety.

The assessment team received full technical and logistic support from the WHO Country Office in Azerbaijan, in particular from Mr Samir Mehdiyev, WHO National Professional Officer on Disaster Preparedness.

### **Data sources**

The research data was drawn from primary and secondary sources. The primary data consisted of structured interviews carried out with important stakeholders, including:

- the Ministry of Health and related departments;
- other government ministries, including the Ministry of Emergency Situations and the Ministry of Ecology and Natural Resources;
- relevant local institutions and private sector organizations;
- United Nations agencies and donor organizations;
- international and national NGOs;
- the military.

The secondary data sources consisted of a desk review of United Nations' and other documents that gave a historical perspective of the evolution of the health system in Azerbaijan and its preparedness for and response to past crises.

### **Data analysis**

Each interview was recorded and the notes were copied to all team members for comment. They were then compared with the notes from the other interviews, and with

information coming from secondary data sources, to find commonalities and contradictions.

Every effort was made to validate statements to ensure accuracy. However, as most interviews were conducted through interpretation from Azeri or Russian into English and vice versa, complete accuracy cannot be guaranteed.

### **Difficulties encountered**

- Confidentiality: preparedness and response plans are considered secrets of the State and it was therefore impossible for the team to obtain access to them.
- Planning the assessment: interviews were often only possible to arrange on the same day or at the earliest the day before, making planning difficult.
- Interviews: because of difficulties in scheduling, many interviews occurred simultaneously and often in locations that were situated far apart. This meant that the team had to divide into groups, the composition of which depended on the areas of expertise of the team members and their interest in the agency or organization of the interviewee(s).

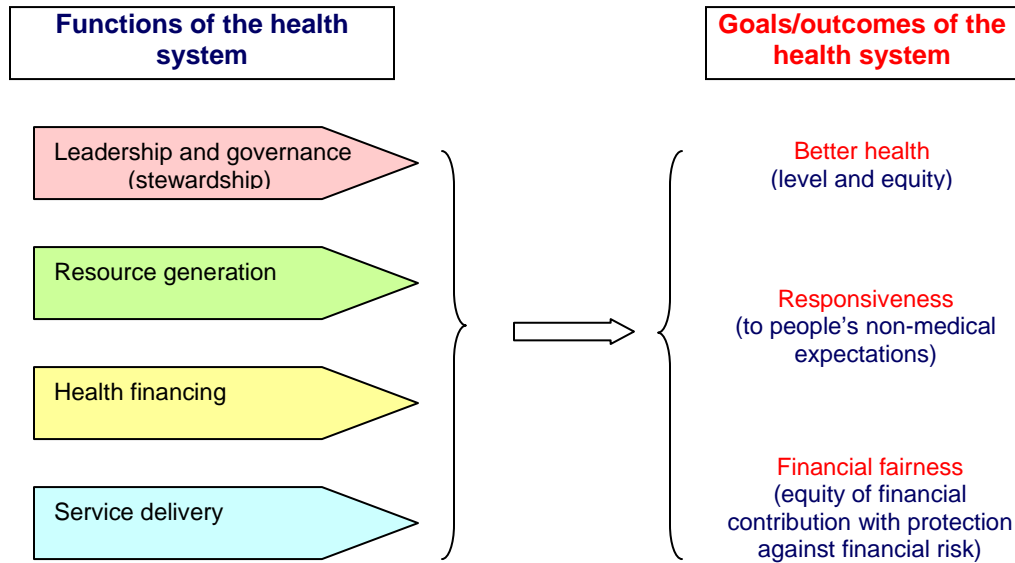
### **Structure of the report**

The WHO health systems' framework (5) was used as the conceptual basis for describing and analysing the elements of the health sector crisis management system in Azerbaijan. A brief description of this framework and how it is adapted to crisis management follows.

Health systems are defined by WHO as comprising all the resources, organizations and institutions that are devoted to taking interdependent action aimed principally at improving, maintaining or restoring health. Further information on health systems can be found in: *The world health report 2000* (5), WHO Regional Office for Europe Health Systems' Strategy (6) and *Everybody's business: Strengthening health systems to improve health outcomes* (7).

In order to fulfil their purpose, all health systems need to perform the following four key functions that make up the WHO health systems' framework (5): (1) leadership and governance; (2) resource generation; (3) health financing; and (4) delivery of health services (Fig. 1).

Fig. 1: WHO Health Systems Framework



**Leadership and governance** of the health system are achieved through careful and responsible management that results in influencing all sectors with regards to policy on and action for population health. In connection with preparedness planning, this means ensuring the existence of national policy that incorporates health system crisis preparedness. It also means having effective coordination structures and partnerships in place and involves advocacy, risk assessment, information management and monitoring and evaluation.

**Resource generation** includes engaging all the health workers aimed primarily at protecting and improving population health. It also encompasses health technologies, infrastructure and pharmaceuticals. In terms of crisis management, preparedness planning ensures that, given the available resources and circumstances, there will be a sufficient number of qualified staff to respond to a crisis. Education and training, the collection, analysis and reporting of data, and management of the supplies and equipment needed to respond to a crisis, also fall under this heading.

The **health financing** function ensures the collection of revenues, their subsequent pooling and, finally, the purchase of health services from providers. In terms of crisis management, a good health financing system ensures that there are adequate funds for health system activities related to risk prevention and mitigation, preparedness and response. It also provides financial protection in case of a crisis, ensures that crisis victims have access to essential services, and that health facilities and equipment are adequately insured for damage or loss.

**Service delivery** relates to a service production process that, when needed, combines the input of various providers into health interventions that are effective, safe and of high quality, and ensures their delivery to relevant individuals or communities in an equitable manner and with a minimum waste of resources. The organization and management of services are reviewed through a health system crisis management process to ensure access, quality, safety and continuity of care across health conditions and health facilities during a crisis.

Table 6 shows the key components of the four functions related to the health system crisis management process.

**Table 6. Key components related to crisis management – by health system function**

<b>Leadership and governance</b>	<b>Resource generation</b>	<b>Health financing</b>	<b>Service delivery</b>
Policy and legislation Institutional framework Essential leadership tasks Partnerships and coordination	Human resources Medical supplies and pharmaceuticals Data collection, analysis and reporting	Preparedness funding Contingency funding	Guidelines and protocols Mass casualty management Risk management of health facilities Lifelines, logistics, telecommunication and security

Health system performance is measured not only by how well each function in the framework is carried out but also by the relationship between the functions. Good interaction is crucial to attaining better health outcomes.

Breaking the assessment into the key components of the four functions allows the reader to: identify tasks that need to be performed; establish responsibilities for undertaking specific tasks; determine how a task is interrelated with other partners, sectors and disciplines; and verify that the task is completed.

The findings and recommendations related to specific areas of the chemical safety and climate change and health are presented separately.

## Leadership and governance

### Policy and legislation

#### *Key points of discussion:*

- Ministry of Health crisis preparedness and response policy.
- National multisectoral preparedness and response policy.
- Compliance with international policy, legislation and agreements.

#### *Findings*

Although no specific health system policies exist for crisis preparedness and response in the Ministry of Health, there are national laws on different aspects of disasters. For example, the Sanitary and Epidemiological Surveillance Department acted in accordance with the law on “sanitary and epidemiological well-being” when responding to the avian influenza outbreak in 2006. The situation regarding crisis preparedness policy in the Ministry of Health might improve as a result of the newly-formed Public Health and Reforms Centre that is responsible for advising the Ministry of Health on policy development through its Health Policy and Reform Department.

A list of government and presidential decrees on disasters is provided in Annex 3. The two most important are the Presidential Decree of 16 December 2005, which establishes that the Ministry of Emergency Situations is responsible for the national management and coordination of disasters, and the Presidential Decree of 19 April 2006 that authorizes the Ministry of Emergency Situations to revise national disaster legislation and lead the process of multisectoral disaster preparedness and response.

The policy for declaring a state of emergency is formulated in Article 112 of the Constitution:

*“Whenever natural calamities take place, epidemic, epizootic, grave ecological and other disasters and also on accomplishment of acts aimed to violation of territorial integrity of the Azerbaijan Republic, revolt or state coup, with mass disorders accompanied by violence, other conflicts threatening life and safety of citizens, or normal activity of state bodies, the President of the Azerbaijan Republic announces state of emergency in individual areas of the Azerbaijan Republic and within 24 hours submits respective decree for approval by Milli Majlis of the Azerbaijan Republic.”<sup>6</sup>*

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<sup>6</sup> [www.un-az.org/doc/constitution.doc](http://www.un-az.org/doc/constitution.doc), accessed 12 August 2008.

The Ministry of Health has taken steps to comply with the revised International Health Regulations (IHR)<sup>7</sup> (3) by appointing Dr Viktor Gasimov, Head, Sanitary and Epidemiological Surveillance Department, as National IHR Focal Point, and Dr Vagif Abdullayev, Deputy Director-General of the Republican Centre for Hygiene and Epidemiology, as Alternate National IHR Focal Point. However, it is anticipated that in the future the national IHR focal point will be an office rather than an individual, in order to minimize dependency on individual persons. Furthermore, the division of IHR-related tasks between the national IHR focal point and other national authorities is yet to be formally defined, taking factors such as technical expertise and decision-making into consideration. The compatibility of the new IHR with national laws needs to be reviewed and a strategy to implement the IHR nationwide needs to be devised. As yet the representatives of most government departments and nongovernmental agencies were either unaware of the IHR or, if informed, had not yet received any official information on how they impact their work.

### ***Recommendations – policy and legislation***

1. The Ministry of Health is advised to consider introducing health system policies that clarify the decision-making structure and the coordination of crisis preparedness and response.
2. The Government might consider formalizing its position as caretaker of the nation's health by ensuring that national policy and legislation recognize the Ministry of Health as the lead agency in all matters of health crisis preparedness and response. Furthermore, the Government could consider granting the Ministry of Health the legal authority to manage public health interventions in case of a crisis (e.g. a pandemic alert), which would facilitate the Ministry of Health in coordinating all actors (internal and external) engaged in health crisis preparedness and response.
3. National legislation needs to be reviewed for compatibility with the provisions of the IHR and revised if necessary to ensure this compatibility.
4. Efforts should be made to increase awareness about IHR among national, multisectoral and multidisciplinary stakeholders and promote a sense of collective ownership.
5. The national IHR focal point needs to be institutionalized and endorsed by the national stakeholders.
6. The division of tasks between the national IHR focal point and the other national authorities should be defined, taking technical expertise and the decision-making mandate into account. It is envisaged that IHR-related tasks will be documented as terms of reference and translated into standard

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<sup>7</sup> [http://www.who.int/mediacentre/news/releases/2005/pr\\_wha03/en/index.html](http://www.who.int/mediacentre/news/releases/2005/pr_wha03/en/index.html), accessed on 15 August 2008.



operating procedures, as this will add to institutional memory and ensure that the work is carried out consistently and in accordance with agreed best practice.

7. Consideration should be given to carrying out advance assessment and planning of core capacity requirements for surveillance and response (IHR, Annex 1A) and points of entry (IHR, Annex 1B), that would result in the development of a national action plan by 15 June 2009 and its implementation to ensure that core capacity is in place throughout the country by 15 June 2012.

## **Institutional framework**

### ***Key points of discussion:***

- A formal, multi-disciplinary all-hazard health system crisis preparedness and response committee.
- A dedicated Health Crisis Coordinator in the Ministry of Health.
- A Health Crisis Management Unit in the Ministry of Health.

### ***Findings***

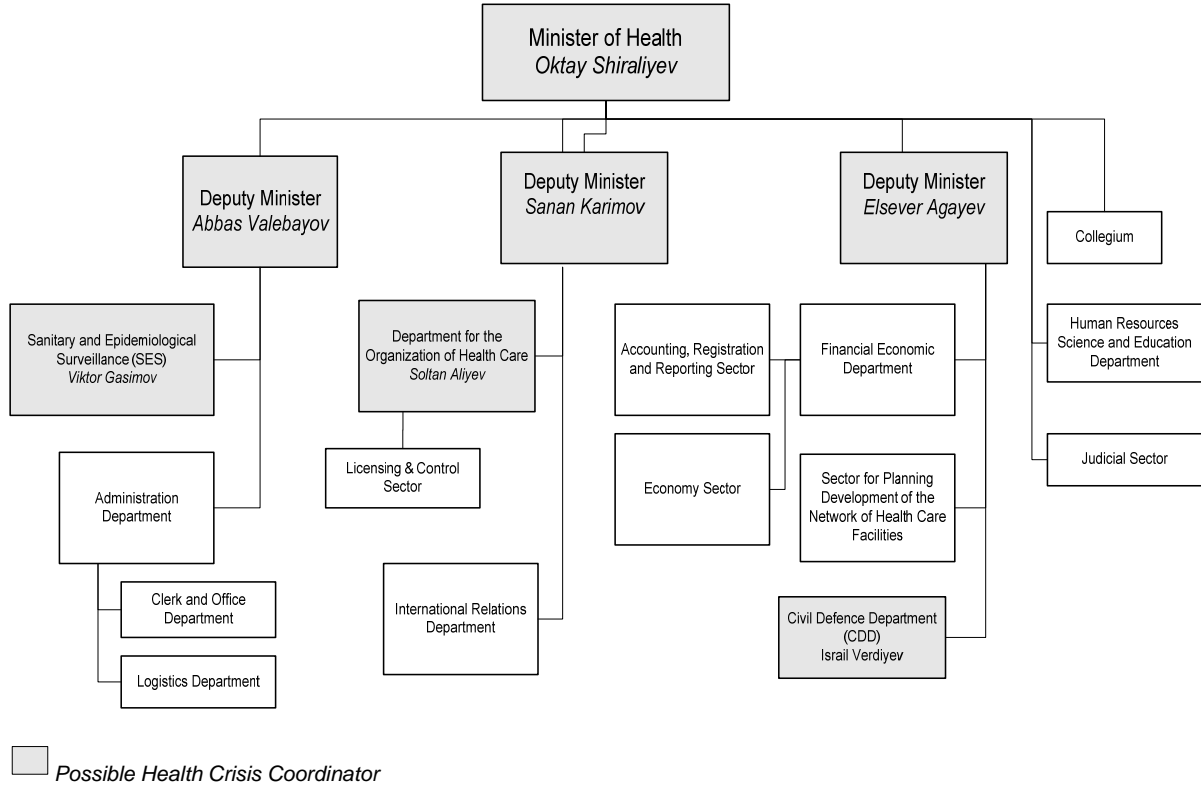
The Ministry of Health has extensive experience in health crisis management because of the different crises (conflicts, flooding, malaria, drought, earthquakes, avian influenza, collapse of buildings) that have impacted Azerbaijan in recent years.

The Ministry of Health responds to crises by convening a Special Emergencies Commission chaired by a Deputy Minister (currently Dr Abbas Valibayov). The Commission is multidisciplinary comprising department heads and specialists. However, it meets only on an ad hoc basis, when a crisis occurs or to organize training drills. One of its main functions is to decide who will coordinate the response to a crisis.

There is also a State Commission on Avian Influenza, chaired by the Deputy Prime Minister, in which other ministries are represented by senior officials.

When a crisis occurs, the Health Crisis Coordinator can be selected from among the following: the Minister of Health, the Deputy Ministers, the Head of the Sanitary and Epidemiological Surveillance Department, the Head of Health Care Delivery or the Head of the Civil Defence Department. This is illustrated in the Ministry of Health organigram in Fig. 2 below.

Fig. 2. Organigram of the Ministry of Health of Azerbaijan



However, the Head of the Sanitary and Epidemiological Surveillance Department does not always select a Health Crisis Coordinator when there is a crisis. The Department has its own vertical structure and coordinating mechanism for responding to a crisis. For example, its Senior Epidemiology Doctor can act autonomously on epidemiological issues. This vertical and autonomous structure extends to the regional offices of the Sanitary and Epidemiological Surveillance Department, which report directly to the Head without involving the regional authorities. Only in the event of a large-scale crisis would the Ministry of Health Special Emergencies Commission be involved.

However, this coordination structure has led to confusion in other government ministries and organizations: for example, among those interviewed, no-one was able to identify who, within the Ministry of Health, would be in charge of coordinating a health crisis response.

The Civil Defence Department of the Ministry of Health has some of the functions of a health crisis management unit in that it is responsible for coordinating the response of the health facilities to provide medical assistance in times of crisis. It also oversees preparedness planning for hospitals and conducts training drills.

### ***Recommendations – institutional framework***

8. The Ministry of Health is advised to consider appointing one person as the Health Crisis Coordinator, as experience has shown that an effective crisis management structure should preferably have only one focal point responsible for all health crisis preparedness planning.
9. The Special Emergencies Commission is advised to consider holding regular meetings to guide, oversee and develop comprehensive preparedness planning across the Ministry of Health.
10. The Special Emergencies Commission is advised to consider including activities related to crisis prevention and mitigation in its agenda in the future.

### **Essential tasks**

#### ***Key points of discussion:***

- Health crisis preparedness planning.
- Public communications.
- Monitoring and evaluation.

### ***Findings***

The Civil Defence Department of the Ministry of Health is responsible for coordinating the response of health facilities to provide medical assistance in crisis. They develop one-year and five-year activity plans, in conjunction with the other departments of the Ministry of Health and the Ministry of Emergency Situations. These plans cover multiple types of crisis. For example, plans exist from the era of the former Soviet Union to re-establish health facilities with all the equipment required in the event of a severe crisis, including a nuclear attack. However, the preparedness plans are confidential and the assessment team was unable to review them.

The occurrence of human cases of avian influenza (virus H5N1) in 2006 prompted efforts to strengthen communicable disease surveillance and response, multisectoral and multidisciplinary coordination and public communication. A preparedness plan for avian influenza has been approved by the Minister of Health. Furthermore, a preparedness plan for pandemic influenza has been developed and was under review by the State Commission on Avian Influenza at the time of the assessment. Both plans were developed in cooperation with WHO and World Bank. The civil defence forces in the regions have their own programmes of training and drills for avian influenza, supervised by the Ministry of Emergency Situations.

The Ministry of Emergency Situations has established scenarios and requirements for different ministries to respond to different crises. They use the experience of the ministries in preparing these response plans to ensure that roles and responsibilities are clearly understood. Simulations are carried out regularly. The Ministry of Emergency Situations is constructing a network of regional branches, each of which will be responsible for four districts. Each branch will have 150 employees and 500 troops to carry out all the duties, including fire-fighting and rescue operations. They will have their own medical teams.

The United Nations Children's fund (UNICEF) confirmed that the Ministry of Emergency Situations is working on a draft national disaster preparedness plan on which they were waiting to comment.

The nature and extent of preparedness planning for other health crises, including surge capacity, could not be verified as the process and the plans are considered confidential.

In collaboration with other Ministry of Health departments and UNICEF, the Sanitary and Epidemiological Surveillance Department was responsible for developing public information during the avian influenza outbreak of 2006. The information was released to the public by the Minister of Health, after being approved by the State Commission on Avian Influenza.

In the regions, information on health matters is issued to the public by the Sanitary and Epidemiological Surveillance Department through newspapers, television, and notice boards placed in town centres. Public information brochures are developed by the Ministry of Health in Baku, collected by health staff from the districts and distributed locally in primary health care and other health facilities.

UNICEF is reportedly working on a draft public communications plan with the Ministry of Health, the Ministry of Agriculture, the Ministry of Education, the Ministry of Emergency Situations and the Ministry of Ecology and Natural Resources. In 2006, UNICEF, supported by the Japanese Embassy, held a three-day training course on crisis communication, media training, press releases, interviews, etc., for government officials, including staff from the Ministry of Health.

In the Ministry of Health, a new department for public information is being instituted at the Public Health and Reforms Centre but it is still in the early stages of development.

The Ministry of Health does not regularly monitor and evaluate preparedness plans as funds are not provided for this activity by the Ministry of Finance. However, simulation exercises, from which lessons are learned, are carried out at the regional hospitals by the Civil Defence Department. There is no formal auditing method or body for coordinating the evaluation of health crises preparedness plans across the Ministry of Health.

### ***Recommendations – essential tasks***

11. The Ministry of Health is advised to share crises preparedness plans with its partners with the aim not only of developing trust but also of ensuring that all stakeholders know their roles and responsibilities.
12. The Ministry of Health is advised to oversee the development of a public information strategy, including materials, in conjunction with technical experts and to pre-determine the authority to disseminate the materials at all levels of the government.
13. The Ministry of Health might consider implementing regular monitoring and evaluation of crises preparedness plans to ensure that these are regularly tested, reviewed and updated to meet requirements.

### **Partnerships**

#### ***Key points of discussion:***

- A national organization dedicated to multisectoral disaster preparedness and response.
- Multisectoral cooperation and coordination through partnerships at international and national levels.

### ***Findings***

Before the Ministry of Emergency Situations was established on 16 December 2005, national disaster preparedness and response was the responsibility of an inter-ministerial Special Emergency Commission, chaired by the Vice Prime Minister and attended by senior representatives from other ministries. The Special Emergencies Commission still exists but it is possible that it will be reorganized to be chaired by the Head of Ministry of Emergency Situations and attended by his deputy ministers and one deputy minister from each relevant ministry. The Ministry of Emergency Situations does not host regular multisectoral coordination meetings unless there is a specific need.

The health component of any crisis is the responsibility of the Ministry of Health. However, the mandate and role of the Ministry of Emergency Situations in the event of a health crisis is unclear. The Ministry of Emergency Situations has a Medical and Curative Care Department but the relationship of this department to the Ministry of Health is yet to be defined. Health matters are under the responsibility of the Ministry of Health. For example, the Minister of Health coordinated a multisectoral response during the avian influenza outbreak, while the Ministry of Emergency Situations supported the response by deploying troops to seal off the affected area and control the birds to prevent spread. The State Commission on Avian Influenza was formed at the inter-ministerial level in response to the crisis and is still in existence.

The Ministry of Emergency Situations is responsible for coordinating the response to different crises and has rapid response teams. For example, in the event of chemical emergencies, the Ministry of Emergency Situations responds through the Department for the Organization of Radioactive, Biological and Chemical Defence in coordination with the Ministry of Health. The departments and organizations under the authority of the Ministry of Emergency Situations are listed in Annex 4.

Within the Ministry of Health, most multisectoral coordination is undertaken independently by various departments. However, coordination meetings take place on an ad hoc basis rather than according to a regular schedule. For example, the Head of the Sanitary and Epidemiological Surveillance Department organizes multisectoral coordination meetings with the Ministry of Emergency Situations, the Ministry of Agriculture and the Ministry of Ecology and Natural Resources.

Additionally, the Republican Anti-plague Station collaborates closely with the Ministry of Agriculture and the Ministry of Emergency Situations. They participate in joint training exercises and have an ongoing dialogue on roles and responsibilities in the event of a crisis. For instance, there is a written agreement with the Ministry of Agriculture on measures for brucellosis. In case of anthrax, a third ministry becomes involved, namely the Ministry of Internal Affairs. The Anti-plague Station is designated by the Ministry of Health as an agency responsible for the surveillance of avian and pandemic influenza. An avian influenza laboratory equipped with real-time polymerase chain reaction (PCR) and other necessary equipment has been established and is operational in the Anti-plague Station.

In the absence of a central coordinating mechanism, various departments of the Ministry of Health have independently initiated coordination and collaboration with outside agencies on an ad hoc basis to respond to threats as they materialize.

In one of the regions visited, there is a permanent multisectoral crisis committee that meets once a month to review any possible interventions or prophylactic measures. The Head of the regional branch of the Sanitary Epidemiological Surveillance Department is a member of this committee. Furthermore, a multisectoral committee specific to avian influenza was established in the regional executive office following an outbreak. This committee still exists and continues to monitor domestic and wild birds. The Ministry of Agriculture, the Ministry of Health, the Defence Threat Reduction Agency (DTRA), UNICEF, the United States Agency for International Development (USAID), and WHO, cooperate on coordinating investment in training and equipment for avian influenza preparedness.

The Ministry of Health has an International Relations Department that recently began organizing multisectoral meetings with other organizations for the Health System Reform Project.

The International Medical Corps was involved in avian influenza preparedness and in collaboration on surveillance<sup>8</sup>. They also had a project in the area of crises medical services.

***Recommendations – partnerships***

14. The Ministry of Health and the Ministry of Emergency Situations are advised to consider defining their roles and responsibilities in health crisis preparedness and response and arranging regular meetings to improve the coordination of their activities that each considers essential in crisis preparedness planning. This would enable the Ministry of Health to build on the existing relationships established by individual departments with other ministries, international organizations and NGOs, possibly developing these to form an official framework for multisectoral cooperation in preparedness for and response to health system crises.
15. The Ministry of Health is advised to consider undertaking an inventory of potential NGO partners (including those in the private sector) and their resources, with a view to establishing collaborative agreements on the basis of what each organization has to offer (human resources, technical support, training, supplies and equipment) for crisis preparedness and response. This would avoid the under-utilization or duplication of existing resources.

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<sup>8</sup> The International Medical Corps completed its activities in Azerbaijan on 31 March 2008.

## Resource generation

### Management of human resources

#### *Key points of discussion:*

- An audit of the crisis preparedness and response skills and experience available in the health sector.
- A volunteer policy.
- An analysis of the health crisis preparedness and response training and education needs.
- National preparedness and response training programmes.
- Guidelines and technical publications.

#### *Findings*

A staff roster for use in a crisis exists but it was not possible to ascertain if a staff audit had been carried out. There is no volunteer policy in place.

It was not possible to verify whether an education and training needs analysis had been carried out by the Ministry of Health. However, the DTRA had made a thorough assessment of training needs. It is their opinion that the university system is not optimal and that basic training is required, particularly for veterinarians. They are working with the Ministry of Health, which has an Institute of Medical Refresher Training (post graduate material), a medical university and three medical colleges for nurses and technicians.

Training in first aid and civil defence is provided by the Humanities Institute as part of crisis preparedness and response. There are also courses for doctors going through civil defence training. Additionally, the Ministry of Health provides further training for the heads of the regional civil defence groups. This is often conducted in collaboration with the Ministry of Emergency Situations and other ministries, as required.

The Civil Defence Department conducts regular drills in 'location-specific' health facilities. These drills are considered more as team training exercises than simulation exercises and involve all staff working in the selected location. Booklets and pamphlets on the composition and equipment of the team exist in Azeri and Russian.

The Military Medical Faculty of the Azerbaijan State Medical University runs extensive health crisis preparedness courses and has developed standard operating procedures and treatment protocols for many different types of disaster scenarios. The Military Medical Faculty sends its staff to international training courses (for example, in Moldova,



Romania, Turkey and the United States). However, these courses focus mainly on earthquakes and terrorism.

The Health System Reform Project has several education and training components. Examples are: the designing of courses by an external consultant to take place over a six-month period; the establishment of a system of licensing and accreditation for medical staff; enhancement of health workers' qualifications through on-site education and training in the two centres to be created with international technical input. The curricula of academies and universities are under review and recommendations for change will be made where necessary.

The Ministry of Emergency Situations is responsible for delivering multisectoral training and simulation exercises in disaster preparedness and response to representatives of other ministries. However, the Ministry of Emergency Situations currently has a shortage of experienced staff.

Annual multisectoral simulation exercises are organized for health staff in three different districts under the auspices of the Ministry of Emergency Situations. The training and simulation exercises are analysed to capture lessons learned and to exchange experiences. The Azerbaijan Red Crescent reported that they had participated in these simulation exercises.

The International Medical Corps, which has trained over 150 health professionals and first responders in evidence-based crisis medicine, reported that most physicians had not had training in crisis preparedness or disaster management.

### ***Recommendations – management of human resources***

16. The Ministry of Health is advised to contemplate undertaking an extensive audit of the crisis and preparedness skills and experience of all health personnel, including doctors, nurses, paramedics, medical technicians, drivers, administrative staff, laboratory technicians, dispatchers, and specialists in media and communications. The audit could also be extended to include the following: public and private health organizations, NGOs, international organizations, the military, the police force, and civil defence. An audit would enable the organization of the necessary expertise for effective delivery (e.g. surge capacity) whenever necessary. It would also facilitate the identification of any gaps in skills that could be dealt with through training or recruitment.
17. Consideration should be given to carrying out a comprehensive training and education needs analysis to identify the skills required for the performance of specific tasks within health crisis preparedness and response.
18. The existing WHO public health crisis management training package should be utilized to guide the development of a national training curriculum for health crisis management.

19. The Ministry of Health is advised to consider developing health crisis preparedness guidelines and technical publications for distribution in the Ministry and among partners to ensure commonality of response.

## **Data collection, analysis and reporting**

### ***Key points of discussion:***

- Regular risk assessment.
- Early warning systems to monitor, evaluate, and report threats.
- Laboratory testing.

### ***Findings***

The Ministry of Health and the Ministry of Emergency Situations reported that they conduct multisectoral risk assessments taking many different factors (weather, chemical and radioactive threat, geopolitical factors, etc.) into consideration, as well as the potential consequences of a crisis. Each risk assessment is pertinent to a region and includes maps. However, since the risk assessments and preparedness plans are confidential, the assessment team was unable to review them.

National and subnational authorities described an effective communicable disease surveillance system. This information is supported by the rapid diagnosis of and response to the avian influenza outbreak in 2006.

When detected, unusual health events and public health risks are communicated by telephone to higher levels of the health sector and to the national IHR focal point. If there is a suspicion, epidemiological and laboratory specialists are immediately deployed and report back to the Ministry of Health by telephone, usually within a day. If a case remains unclear, they refer to WHO, in accordance with the IHR guidelines.

At various entry points to the country, there are Sanitary Quarantine Services specialists who carry out surveillance and analysis, document events and make decisions on a case-by-case basis.

There is a shortage of trained personnel and computer networks for reporting purposes, which is a constraint to the effectiveness of the current surveillance system. This is being remedied to some degree through the establishment of a web-based reporting system, (electronic infectious disease surveillance system) in collaboration with DTRA and USAID. However, this system will face substantial challenges as there is limited computerization throughout the country, especially at the local level.

A 24-hour information line exists in the reception office of the Minister of Health and is responsible for distributing early warning information to Ministry of Health departments as needed. For example, the central meteorology station faxes weather forecasts on a daily basis to this line for further distribution. The central meteorology station also sends information to the meteorology offices in the districts responsible for disseminating the information to the local health services.

The Ministry of Emergency Situations has an Emergency Operations Centre that is currently being converted into a state-of-the-art centre that is scheduled to be inaugurated on the 10 May 2008, the President's birthday.<sup>9</sup>

The Anti-plague Stations are tasked with preparedness, laboratory diagnosis and response with regard to "especially dangerous diseases", such as anthrax, brucellosis, cholera, plague, rabies, tularaemia, etc. The main centre in Baku (the Republican Anti-plague Station) has 200 staff and seven laboratories. It has procured stationery and mobile equipment in order to improve its capacity for PCR analysis. There are six regional divisions with an additional 400 staff.

The sanitary and epidemiological surveillance laboratories in the regions are similar to those of the regional Anti-plague Stations and can be used to confirm and double-check samples. After confirmation, the results (not the samples) are sent to the Ministry of Health and the national sanitary and epidemiological surveillance laboratories. If the samples need to be re-checked, these are also included. The national laboratory carries out quality control of random samples. The transport of the samples is sometimes undertaken in cool boxes provided by international organizations. Chemical and radio-nuclear analyses are regularly performed on selected products. It is planned to establish a poison centre. At present there is no capacity to diagnose some diseases, such as those caused by arboviruses and adenoviruses.

The Ministry of Health is collaborating with DTRA in building a laboratory network to detect and diagnose 18 pathogens. This project includes the renovation of existing laboratory facilities and the supply of equipment (including personal protective equipment and training). The Government of Azerbaijan is funding a bio-safety category-3 laboratory to be shared between the Ministry of Health and the veterinary services.

A national reference laboratory for TB is also being set up in Baku. Its equipment will be provided by the German Development Bank that has offered to expand this project beyond TB, if requested to do so by the Ministry of Health.

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<sup>9</sup> A new emergency operations centre, built with funding from World Bank and WHO, was opened in January 2008 in the Ministry of Health. It will progressively serve as an emergency telecommunications centre, a media centre and a training centre for the regions. It will also serve as a coordination centre for crisis response.

The laboratories participate in international networks to gain access to laboratory facilities unavailable domestically. For example, avian influenza samples were sent to London, United Kingdom (human samples to the Mill Hill Laboratory, animal samples to the Weybridge Laboratory) during the 2006 outbreak, and polio samples are regularly sent to a reference laboratory in Moscow for diagnosis. Participation in such networks will be strengthened in the future.

Major limitations during a health crisis as described by Ministry of Health departments and outside agencies could be: laboratory capacity (too slow); transportation of samples; outdated equipment and limited computerization (although modernization is ongoing); and lack of human resources (adequately trained personnel).

### ***Recommendations – data collection, analysis and reporting***

20. The Ministry of Health is advised to consider sharing its risk assessments among partners for comment and input. This would greatly enhance the crisis preparedness planning process for all stakeholders.
21. The Ministry of Health should propose linking their Emergency Operating Centre electronically with that of the Ministry of Emergency Situations to facilitate a rapid exchange of information in the event of a crisis.
22. The Ministry of Health is advised to consider developing a list of staff members for the Emergency Operating Centre, as well as their terms of reference, to ensure the effective use of the centre.
23. The Ministry of Health is advised to consider undertaking a review of its requirements in terms of laboratory personnel and equipment with a view to determining the gaps in processing time through lack of trained personnel and technical equipment.

### **Medical supplies and equipment**

#### ***Key points of discussion:***

- Reserves of and an inventory process for critical supplies and equipment.
- Procedures for the urgent contracting of supplies and services.
- Procedures for requesting, accepting, rejecting and managing international assistance (material, technical expertise) in times of crises.
- Policies and agreements for sharing resources with other partners.
- Supplies and equipment for an influenza pandemic.

### ***Findings***

The team was informed that sufficient stores of materials exist to replenish the supplies and equipment (including personal protective equipment) needed by the health facilities in case of a severe crisis, including a nuclear attack. In addition, each district hospital has the resources that are essential in emergencies. The Ministry of Emergency Situations also has an extensive reserve of various supplies that can be allocated in a crisis. No detailed assessment of the supplies was conducted as part of this mission.

In the Ministry of Health, the Innovation and Supply Centre is responsible for the procurement and distribution of medical supplies. However, to access funding for urgently required supplies, the Ministry of Health must go through the Ministry of Finance, which implies that the procedures in place for contracting health supplies and equipment in a crisis are not fast-tracked.

No policies exist on sharing resources with the NGO stakeholders. Therefore, before supplies can be released (for example, to UNICEF), it is necessary to obtain a government request.

***Recommendations – medical supplies and equipment***

24. The Ministry of Health is advised to consider auditing the stores of supplies and equipment. Until this has been done, and an inventory management system is in place, the existence of out-of-date items cannot be ruled out.
25. The Ministry of Health might consider revising its procedures for contracting goods and services and establishing policies and agreements with partners on sharing resources in a crisis situation, which would greatly facilitate the allocation of supplies.

## Health financing

### Preparedness financing

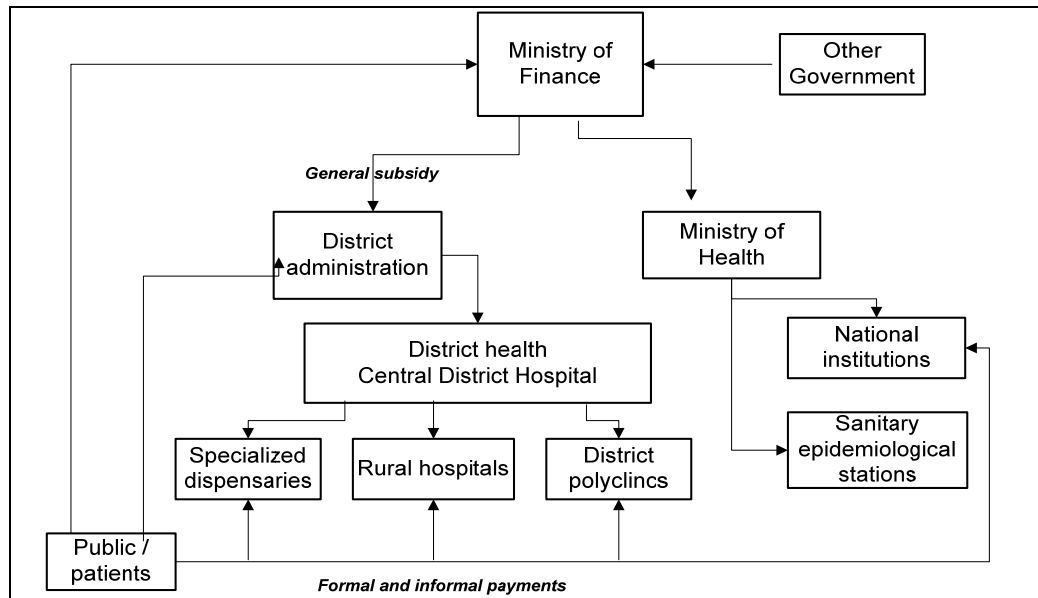
#### *Key points of discussion:*

- The annual Ministry of Health budget allocation for the preparedness planning process.
- Insurance of vital health facilities (hospitals, laboratories, etc) in case of damage.

#### *Findings*

The Ministry of Health controls about 26% of the total health budget that is allocated by the Ministry of Finance in consultation with the Government. Four per cent is allocated by other ministries and the remainder (approximately 70%) goes directly to the district administrations responsible for managing the local health care budgets and dispensing funds to local hospitals and health facilities. The flow of funding from the Ministry of Finance is illustrated in Fig. 3.

**Fig. 3. Flow of funds for the health system in Azerbaijan**



Source: *Health Care Systems in Transition – Azerbaijan*. Copenhagen, WHO Regional Office for Europe, 1996. (Financing flow chart)

Although it was evident that funds are being used on preparedness planning, at both regional and central levels, it was not possible to determine how much. Also,

preparedness activities do not figure as a specific line item or as a percentage of the Ministry of Health budget. However, the Health System Reform Project is working to increase the Ministry of Health's control of the budget and funding for preparedness planning.

Hospitals and other crucial health facilities are not insured. Under the Health System Reform Project, hospitals will have greater autonomy as regards their budgets and be able to determine their insurance needs.

### ***Recommendations – preparedness funding***

26. The Ministry of Health is advised to determine, through risk assessment, the appropriate percentages of the health budget for allocation centrally and in the regions to meet the requirements of the preparedness planning process on an annual basis.
27. The Ministry of Health is advised to consider making it a requirement for health facilities to purchase comprehensive insurance against hazards determined in a risk assessment, including events such as fire, flooding, structural collapse, or the like. Fast-track mechanisms for processing claims need to be negotiated with the insurance providers in advance.

### **Contingency funding**

#### ***Key points of discussion:***

- The Ministry of Health contingency fund.
- The national multisectoral contingency fund.

#### ***Findings***

A small contingency fund exists within the Ministry of Health for utilization in a crisis. There is also an arrangement with the Ministry of Finance to allocate additional funds in such cases. However, as noted by one interviewee, the process of mobilizing resources from the Ministry of Finance is time-consuming.

At national level, the Ministry of Emergency Situations has a contingency fund and can assist with funding should the need arise.

At regional level, the budget is used only for everyday activities. There are no contingency funds and the authorities are dependent on the national budget in the event of a crisis.

***Recommendation – contingency funding***

28. It is advised that consideration be given to the inclusion of a sufficient contingency fund in the Ministry of Health's budget specifically for response to a crisis situation. Contingency funding would be required to cover the main staffing needs and the procurement of essential supplies and services in the short-term for each scenario outlined in the risk assessment and based on historical data from past crises. Administrative procedures to access and allocate contingency funding in a crisis need to be fast-tracked, flexible and transparent.



## Service delivery

### Procedures, guidelines and protocols

#### *Key points of discussion:*

- Surveillance, procedures and control of communicable diseases in the event of a crisis.
- Rapid needs assessment.
- Ability to respond to the specific health consequences of the crisis.

#### *Findings*

The existing preparedness plans of the Ministry of Health are disease-specific response plans, e.g. with regard to avian influenza, polio and other diseases, such as severe acute respiratory syndrome (SARS) and foodborne diseases. Some of these plans are at Ministry of Health level; others are at national level and shared with other ministries.

The regional sanitary and epidemiological surveillance offices have activity plans that take crisis preparedness into consideration. Their staff receives training in Baku. There is no separate plan for the Anti-plague Stations, as they act in conjunction with the sanitary and epidemiological surveillance offices. For example, in a brucellosis outbreak, they would respond jointly. The plans also specify that Rescue Teams comprise four members. The especially dangerous diseases that are under the responsibility of the Anti-plague Stations are covered in the plans and exact procedures are provided.

Rapid response teams are present at the Hygiene and Epidemiology Centres and the Anti-plague Stations at regional and national levels. Although not assessed in detail, rapid response teams reportedly have access to expertise related to hazards of infectious, chemical and radio-nuclear origin, to personal protective equipment and to means of radio-communication and transport.

The Republican Centre for Hygiene and Epidemiology specified that roles and responsibilities during a crisis are outlined in the regulations and that supplementary plans are created on an ad hoc basis. The Republican Centre for Hygiene and Epidemiology confirmed that there are rapid response teams with expertise in infectious, chemical and radio-nuclear hazards.

The nature and extent of preparedness planning for health crises, including surge capacity, could not be verified, as the process and the plans are considered confidential.

### ***Recommendations – procedures, guidelines and protocols***

29. The Ministry of Health is advised to ensure that preparedness plans and service standards exist and that the plans are regularly tested and updated and available to all partners.
30. WHO and other partners should consider providing guidance materials and sharing lessons learned, good practices, etc., to support the preparedness planning process.

### **Risk management of health facilities**

#### ***Key points of discussion:***

- Assessment of health facilities for structural and non-structural risk.
- Feasible and affordable mitigation measures.
- Implementation of the recommended essential mitigation measures.
- Construction of new health facilities to ensure continuity of operations in the event of a crisis.

#### ***Findings***

In the Ministry of Health, the Construction Department is responsible for supervising the building of new hospitals, ensuring they meet building code standards and, once completed, taking them over. In the districts, the architectural sections of the local authorities are responsible for the technical inspection of the hospitals.

It is not known, to what extent (if any) the resilience of the existing health facilities against key hazards (especially earthquakes) has been assessed, whether essential mitigation measures have been implemented or if there are plans to do so.

### **Logistics, telecommunications and security**

#### ***Key points of discussion:***

- Logistics support to ensure the transport of patients, health staff, goods and services during a crisis.
- Telecommunications.
- Security plan for health facilities.

#### ***Findings***

The districts have specialized vehicles and brigades of doctors and support personnel. They are responsible for the evacuation and transportation of patients to hospital and for

administering first aid, and they have all the necessary equipment. There is a new fleet of 150 ambulances that will be fully equipped with GPS navigation systems that will enhance their effectiveness. A very high frequency (VHF) radio network has been established in some of the remote locations. Otherwise, there is no standby telecommunication network that can be activated should the normal telecommunication networks be disrupted. Security plans may exist but, like the preparedness plans, they are confidential.

***Recommendations – logistics, telecommunications and security***

31. The key problem areas in a crisis – such as transportation and warehouses for the storage of medical supplies, generators and fuel stocks – should be included in the preparedness plans of all health facilities and response teams.
32. A standby telecommunications network from the local level to the new Emergency Operations Centre of the Ministry of Health should be available for the crisis response teams and compatible with the systems available in the Emergency Operations Centre of the Ministry of Emergency Situations. These systems need to be tested regularly, and Ministry of Health staff trained in using them as part of regular staff training and preparedness plan simulation exercises.
33. The Ministry of Health is advised to consider, together with the local authorities, developing security plans to protect the health facilities.

## Chemical safety

### General chemicals management

Azerbaijan has not developed a national management profile on chemicals, as recommended by the Intergovernmental Forum on Chemical Safety (IFCS)<sup>10</sup>, the International Conference on Chemicals Management (ICCM)<sup>11</sup> and the Global Environment Facility (GEF)<sup>12</sup>. There are no related national action plans in place or an interministerial/intersectoral coordinating mechanism (e.g. committee or body) to facilitate the comprehensive handling of chemical safety issues.

### *Crisis preparedness and response*

The Ministry for Emergency Situations has the overall responsibility for crisis preparedness and response.

There is no specific public health plan for chemical accidents. Azerbaijan has not ratified the International Labour Organization (ILO) Convention 174 on *Prevention of Major Industrial Accidents* (8). However, they have adopted the *UNECE Convention on the Transboundary Effects of Industrial Accidents* (9) by the Law of the Republic of Azerbaijan No. 645-IIQ of 04 May 2004.

### *Poison centre*

Azerbaijan does not have a poison centre at the moment. They have a centre of clinical toxicology, which was established in 1982.

It is planned to establish a toxicology-poison centre to respond to chemical emergencies. This is now included in the Biennial Collaborative Agreement (BCA) for 2008-2009 between the Ministry of Health and WHO.

### *Emission inventories and pollutant release and transfer registers*

Azerbaijan has only an air inventory system. Work on the design of an emission inventory system has started.

### *Illegal traffic in toxic and dangerous products*

The State Customs Committee of the Azerbaijan Republic is responsible for the prevention of illegal trafficking of toxic and dangerous products.

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<sup>10</sup> <http://www.who.int/ifcs/en/>, accessed on 15 August 2008.

<sup>11</sup> <http://www.chem.unep.ch/ICCM/ICCM.htm>, accessed on 15 August 2008.

<sup>12</sup> <http://www.gefweb.org/>, accessed on 15 August 2008.

## National laws and regulations on chemicals

### ***Chemicals***

There is no specific law on chemicals. Some regulations are contained in the laws “*On environmental safety*” (No. 677 of 8 June 1999); “*On environmental protection*” (No. 678 of 8 June 1999); “*On water and sewage*” (No. 723 of 28 October 1999); “*On air protection*” (No. 109 of 27 March 2001); “*On sanitary-epidemiological welfare*” (No. 372 of 10 November 1992). Azerbaijan has not started to implement the Globally Harmonized System for Classification and Labelling of Chemicals.

### ***Workers’ health***

ILO Convention 170 on *Safety in the Use of Chemicals at Work (10)* was not ratified by Azerbaijan.

### ***Pesticides***

Aspects of pesticides’ management are covered by some regulations under the law “*On pesticides and agrochemical substances*” (No. 294-IQ of 20 October 1997).

### ***Waste and hazardous waste***

There is a law “*On Industrial and Municipal Wastes*” (N 692-IQD of 22 June 1999); a Government Order “*On Certification of Hazardous Wastes*” (2007) and “*The State Strategy on the Management of Hazardous Wastes*” (2006).

## International conventions and agreements

Azerbaijan has ratified the *Basel Convention on the Transboundary Movements of Hazardous Wastes and their Disposal (11)*. The national reports for the Basel Convention are being prepared in accordance with the requirements of the Convention.

In 2004, Azerbaijan acceded to the *Stockholm Convention on Persistent Organic Pollutants (12)*, for which the official contact point is at the Ministry of Ecology and Natural Resources. The national plan on the implementation of the Stockholm Convention has not yet been submitted to the Convention secretariat.

The country is not a party to the *Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (13)* and has not nominated a national focal point for Strategic Approach to International Chemicals Management. A national profile on chemicals’ management in Azerbaijan has not been prepared as recommended by the Intergovernmental Forum on Chemical Safety (14) and the International Conference on Chemicals Management, First session, Dubai, United Arab Emirates, 4-6 February 2006 (15).

## **Chemical analysis laboratories**

The Republican Centre for Hygiene and Epidemiology under the Ministry of Health has sanitary chemical laboratories that analyse food, water, cosmetics, and household products. The laboratories are compact and well equipped with newly-purchased electronic instruments, such as gas chromatographs and atomic absorption spectrophotometers. Some of the staff members have received training abroad in the use of these instruments.

The toxicology laboratory that serves the whole of the country is in a poor condition – as regards both the premises and instrumentation – and needs upgrading. Biological samples are not analysed in these laboratories.

The Ministry of Ecology and Natural Resources has laboratories for monitoring soil, air and water, while the Ministry of Emergency Situations has chemical, biological, radio-nuclear (CBRN) laboratories. These laboratories were not visited during the mission.

## **Specific chemical safety issues**

### ***Obsolete pesticides***

There are about 8000 tons of obsolete pesticides in Azerbaijan. In 2004, a national centre was established to sort, dispose and make an inventory of obsolete stocks of pesticides and a secure landfill for storing organic pollutants was built in Gobustan, located 60 kilometres from Baku.

### ***Mercury***

As a result of the chlorine-alkali production at the Sumgayit plant for surface-active substances, up to 40 000 cubic meters of mercury-contaminated sludge has been accumulated. The World Bank has launched a US \$2.7 million project to clean up a chlorine-producing plant where there has been a spillage of more than 1500 tons of mercury. The project includes the construction of a secure landfill. Other international projects funded by Japan, the United Kingdom and the United States have also been implemented.

## ***Recommendations – chemical safety***

34. An assessment of the existing infrastructure for the management of chemicals needs to be carried out as an important step towards systematically building national capacity in this area and consideration should be given to applying for technical and financial assistance, for example, to the United Nations Institute for Training and Research and the Global Environment Facility.
35. Consideration should be given to appointing a focal point for the Strategic Approach to International Chemicals' Management so that Azerbaijan may

- become eligible to submit project proposals on chemicals' management to the Strategic Approach to International Chemicals' Management Quick Start Programme Trust Fund;
36. The Ministry of Health is advised to consider initiating the establishment of a poison-toxicology centre, as already foreseen in the BCA for 2008–2009 with WHO.

## Climate change and health

### Background

#### *Climate change in Azerbaijan*

Of the eleven climate zones in the world, nine pass through Azerbaijan. Climate change will affect these zones in various ways with possible serious consequences for the country.

Climate projections for Azerbaijan mentioned by the Ministry of Ecology and Natural Resources include:

- a possible 5 °C rise in average annual temperatures by the end of the century;
- a possible rise in the current maximum temperature of 42–46 °C and 47–50 °C;
- controversy in predicting rainfall: will there be a decrease or an increase?
- an increase in vapour resulting in very high humidity.

*The First National Communication of Azerbaijan to the United Nations Framework Convention on Climate Change (UNFCCC) (2000) (16)* gave an analysis of the projected climatic changes and their possible impact on ecosystems and various sectors of the economy in the country, and outlined mitigation and adaptation options. An analysis of the meteorological data shows that temperatures rose 0.3–0.6 °C between 1960 and 1990 and that precipitation decreased by 10%. According to projections for Azerbaijan, assuming a doubling of CO<sub>2</sub> concentration in the atmosphere, the increase in air temperature is expected to be 2 °C and precipitation may be stable or insignificantly below the norm by the year 2100. Water resources may decrease by 15–20%, the level of the Caspian Sea may rise by 120–250 cm by 2020–2040, and agricultural productivity may be reduced.

#### *Observed natural disasters*

The top ten natural disasters in Azerbaijan in the latest ten-year period are listed in the International Disaster Database of the Centre for Research on the Epidemiology of Disasters (4).



### ***Possible health effects of climate change in Azerbaijan***

An increase in the frequency and intensity of extreme weather events, such as floods, storms, droughts or heat-waves, can lead to particular health effects in the exposed population.

As summarized in the recent document on how to protect health from climate change, the potential direct and indirect health impacts of floods include (17):

- drowning, injuries, diarrhoeal diseases, vector-borne diseases (including rodent-borne diseases), respiratory infections, skin and eye infections, and mental health problems;
- damage to infrastructures for health care, water and sanitation, damage to crops (and/or disruption of food supply) and property (lack of shelter), disruption of livelihood, and population displacement.

Drought may lead to adverse effects on child growth, water-related diseases, such as diarrhoeal diseases and eye infections, malnutrition, and changes in food production, food security and food safety.

During heat-waves, excess mortality due to heat-stroke and cardiovascular and respiratory diseases have been observed and the elderly, the chronically ill and small children are among the most vulnerable in the population.

The First National Communication (16) and its addendum (18) do not include chapters on health with adaptation measures focusing on water resources, agriculture, the coastal zone, forestry and land resources relevant to the economy of Azerbaijan. However, during the interviews, health was mentioned among the main priorities of the Second National Communication.

## **Assessment results – climate change**

### ***Observed impact of climate change on human health***

#### **At national level**

According to some of the interviewees at the national level (Annex 5) some impact of climatic change has already been observed in Azerbaijan: for example, warmer temperatures and heat-waves have resulted in the hospitalization of more people in the summer.

Even though the number of rodents has increased (also at the time of year when there are usually no rodents though recent summers have been too hot for breeding), no cases of

cholera have been observed in recent years, the last outbreak having occurred in 1998<sup>13</sup>. Avian influenza was mentioned as a disease that could have emerged due to climate-change<sup>14</sup>. The laboratory capacity for the identification of arboviruses and adenoviruses is being strengthened, which will be useful if corresponding diseases become more common in the future.

### **Regional level (Khachmaz district)**

In general, people in the Khachmaz district like their climate. Living in an area that is protected between the sea and the mountains, they do not experience weather or climate extremes, such as winds or extreme temperatures. The climate might affect health but the impact of climate change on health is not perceived as a priority in the region.

However, some observed climate-related impact on human health was mentioned during the interviews in the Khachmaz district:

- the effects of heat on the health of the elderly;
- regular flooding, mainly causing a loss of livestock and property;
- the inability of the water-cleaning facilities to cope during flooding (River Gudyalchay).

### **Preparedness for high temperatures and heat-waves**

In regional hospitals, cooling facilities such as air conditioning do exist. From the interviews it appeared that treatment protocols for the management of heat related illnesses, including heat stroke, were not available.

### **Spread of infectious diseases**

There has been a reduction in the number of malaria cases as it is becoming too hot and dry for the disease to spread. Between 1994 and 1998, approximately 50–100 cases occurred per year, while in recent years only 3–4 cases per year have been registered. Control measures include spraying with insecticides, case detection and treatment, and testing and examination of residents. Spraying used to take place every season but this has stopped.

At national level, the first health concern in relation to climate change would be avian influenza due to migrating birds.

The impact of cold weather on health was questioned. Environmental pollution due to the oil boom and its effect on human health were seen as a priority.

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<sup>13</sup> The relation to climate-change is uncertain.

<sup>14</sup> The emergence of H5N1 is not related to climate change but the migration patterns of birds are.

Interviewees agreed that, globally, climate change needs to be addressed as a priority issue. However, the problems linked to climate change are seen as comparably insignificant for Azerbaijan as the country is small and, therefore, fewer people are affected. The problem was perceived to be more severe for countries like China, the Russian Federation or the United States. It was acknowledged that, ultimately, climate change could also be closely related to migration with cross border and international implications that could also affect Azerbaijan.

### ***Weather forecasting, forecasting of extreme events and early warning***

During the interview held at the Ministry of Ecology and Natural Resources, which includes the national meteorological services (Hydromet), it was explained that weather forecasts are made available 3–5 days in advance and shared with the Ministry of Health and the mass media. A 24-hour telephone line at the general reception of Ministry of Health receives specific warnings. The Ministry of Ecology and Natural Resources sends information by telefax to this line in case of an alert. In addition, a weather bulletin is released by the Ministry of Ecology and Natural Resources on a daily basis and sent to Dr. Victor Gasimov, the Head of the Sanitary and Epidemiological Surveillance, who disseminates it to the respective departments within the Ministry of Health. The lead-time of these weather warnings was not specifically mentioned. For the city of Baku, forecasts of strong wind and snow are particularly relevant. Clarification is needed as to whether the information issued to the Ministry of Health differs in any way to that given to the mass media, e.g. whether it is issued earlier, is more detailed or has specific warnings attached, and whether a link between the meteorological services and the Ministry of Health has been formally established.

Alerts about heavy rainfall, heat-waves and cold temperatures are also sent out. The Ministry of Ecology and Natural Resources, together with the Academy of Sciences, issues a medical meteorological forecast mentioning possible effects on human health and vulnerable population groups. Again, it was not entirely clear from the interview how, when and for whom this information is made available. Unfortunately, owing to time constraints, it was not possible to visit the Academy of Sciences, which was mentioned as being responsible for developing heat-related health advice.

It was perceived that forecasting and the early warning system work well and that the information provided is timely.

Certain measures have been taken to protect health. For example, the Ministry of Defence has modified the length of time that soldiers may stand in the sun.

Projects that are planned under the Hydrometeorological Development Programme include the development of information material on the effects of ultra violet (UV) radiation on health and preparations for forecasting UV levels to the public.

The Ministry of Emergency Situations receives daily meteorological bulletins giving three-day weather forecasts and takes preventive measures during adverse climatic conditions.

### **Weather forecast and early warning in the region**

The central meteorological station in Baku sends information to the national meteorological services (Hydromet, Baku) that, in turn, send it to the district meteorological offices that are responsible for dissemination of information locally. The meteorological offices in the respective regional towns share the information with the health services. The head of the concerned Rayon who has executive power is also informed directly by the Ministry of Health in case of an alert.

### ***Public health response to adverse weather conditions***

In the case of extreme weather events, the Special Emergencies Commission meets and discusses the response measures to be taken, including those relevant to public health. The information is distributed through governmental structures, including the Ministry of Health.

UNICEF confirmed that the Ministry of Health issues warnings and messages to the public, mainly the vulnerable population groups concerned, through television broadcasts and the press.

### ***Climate change adaptation measures in the health sector***

Climate change is perceived as a priority and the need for the Ministry of Health to pay attention to this area was expressed. Its impact has already been observed in the population, for example, the effects on health of temperatures as high as 50 °C and colder winters. The Ministry of Health is seen as the leading agency with respect to developing recommendations on adaptation measures and preparing and training medical doctors. Five-year plans are of a multi-hazard nature and used in relation to all types of disaster, including those related to climate. The Ministry of Emergency Situations is responsible for following climatic change and projections of climatic change.

According to information from UNICEF, it is not known whether disasters related to climate change are included in the draft national preparedness plan. In connection with controlling the rat population, the Central Anti-plague Station is monitoring three areas in which plague has previously been observed.

### ***Climate change mitigation***

Climate change mitigation activities are being set up in collaboration with the United Nations Development Programme (UNDP) and as part of the UNFCCC. UNDP is running projects on capacity building for the country's participation in the clean developing mechanism. A greenhouse gas inventory for the country has been established as part of the climate change convention (17).

The Second National Communication to UNFCCC will include a chapter on climate change adaptation measures, including those related to health. This chapter is being formulated by a multisectoral working group on adaptation within the framework of the UNDP project. The working group includes experts in ecosystems, economy, health, agriculture, and others. The second National Communication is expected to be ready in early 2009.

### ***Conclusions and recommendations – climate change***

#### **Strengths**

- An early warning system for extreme events is in place (Hydromet and the Ministry of Health), but lines of communication and the development of public health advice could be strengthened.

#### **Weaknesses**

There is a lack of:

- a national assessment of the impact of climate change on the health of the population;
- official links and structured ways of collaboration between agencies;
- consideration of climate change in the health sector. Other priorities dominate in the health sector. If climate change is considered at all, it is by other sectors, such as those for energy, agriculture and forestry.

#### **Opportunities**

- The involvement of the Global Environment Facility and the UNDP in the preparation of the National Communications to UNFCCC, together with the State Hydrometeorological Committee. A second National Communication is planned, which will include a chapter on the observed and projected impact of climate change on human health and adaptation measures.
- The planned adaptation of the sanitary and epidemiological surveillance system to serve new requirements and challenges.

- The inclusion of disaster management in the strategic plan for 2005–2007 of the Azerbaijan Red Crescent Society.
- Mention in the First National Communication to UNFCCC that universities in Azerbaijan offer training in areas and topics relevant to climate change that could be used as a starting point for introducing climate change into the medical and public health curricula.

The connection between climate change and its possible impact on human health has not yet been formally established in Azerbaijan. It is not taken into consideration in national preparedness plans or long-term planning. There is a strong interest in climate change in the Ministry of Ecology and Natural Resources, which has strong departments for hydrometeorology, climate change and ozone. These could serve as a starting point for collaboration with the health sector on the protection of human health from climate change.

The prevention of and response to the impact of climate change on health require a portfolio of action at different levels: from health system preparedness, coordinated with meteorological early warning systems, to timely advice for the public and health professionals and improvements in housing and urban planning. In general, health systems need to strengthen their stewardship functions and capacity to work with other sectors on a proactive, multidisciplinary and multisectoral approach to the protection of human health from climate change. Action within the health system could include:

- i) strengthening health security;
- ii) advocating health in other sectors;
- iii) sharing good practice in intersectoral action;
- iv) building capacity in the health work force;
- v) providing intelligence; and
- vi) setting an example by “greening” the health services (17).

Ways need to be found in Azerbaijan to integrate the health sector in the climate change debate and motivate participation and leadership. The relationship between climate change and health, e.g. extreme weather events and their impact on health, need to be investigated as a basis for the development of adaptation measures.

***Summary of recommended action towards improving adaptation to climate change in the health sector***

- To conduct a national assessment of health risks related to climate change.
- To strengthen the Second National Communication to UNFCCC on health aspects of climate change.
- To agree on a lead body to coordinate the public health preparedness for and response to climate change.
- To review and strengthen the legal framework to allow official collaboration between meteorological services, the health sector and other sectors.
- To define roles and responsibilities and set up clear lines of communication.
- To strengthen existing disease surveillance systems and to include climate-related health outcomes.
- To identify and monitor risk groups.
- To develop treatment protocols for climate-related health problems.
- To coordinate the development of health promotion materials and a structured approval system.
- To provide training and guidance for medical professionals and advice for the public on measures to be taken during extreme weather events, such as heat-waves, flooding and droughts.
- To raise awareness among governmental departments, medical professionals and the public.
- To maintain international and regional cooperation.
- To set up a monitoring and evaluation mechanism.

Several of these recommendations are in line with – or even overlap – the recommendations on crisis preparedness. Therefore, it is important to look for ways of incorporating measures of preparedness for and response to the impact of climate change on health into existing and developing schemes, such as the national disaster preparedness plan or the IHR (7).

## **Overall conclusion**

The Ministry of Health of Azerbaijan has a wealth of experience in crisis preparedness and response that has garnered over the last decade through conflict, complex emergencies, earthquakes, flooding, drought, avian influenza and the new phenomenon of building collapse. However, some of the procedures and systems established for health crisis preparedness and response have become eroded and/or outdated. The leaning towards autonomous, vertical command and control mechanisms, coupled with secrecy at many levels of government over crisis preparedness and response, needs to change and become more inclusive and transparent.

Despite considerable institutional knowledge and experience in health systems crisis preparedness and response, the Ministry of Health is in dire need of funding to modernize and improve the overall health system functions in order to be prepared for future crises.

## **List of recommendations**

### ***Policy and legislation***

1. The Ministry of Health is advised to consider introducing health system policies that clarify the decision-making structure and the coordination of crisis preparedness and response.
2. The Government might consider formalizing its position as caretaker of the nation's health by ensuring that national policy and legislation recognize the Ministry of Health as the lead agency in all matters of health crisis preparedness and response. Furthermore, the Government might consider granting the Ministry of Health the legal authority to manage public health interventions in case of a crisis (e.g. a pandemic alert), which would facilitate the Ministry of Health in coordinating all actors (internal and external) engaged in health crisis preparedness and response.
3. Consideration should be given to reviewing the national legislation for compatibility with the provisions of the IHR and to revising it, if necessary, to ensure this compatibility.
4. Efforts need to be made to increase awareness about IHR among national, multisectoral and multidisciplinary stakeholders and promote a sense of collective ownership.
5. The position of national IHR focal point should be institutionalized and endorsed by the national stakeholders;



6. The division of tasks between the national IHR focal point and the other national authorities needs to be defined, taking technical expertise and the decision-making mandate into account. It is envisaged that IHR-related tasks will be documented as terms of reference and translated into standard operating procedures, as this will add to institutional memory and ensure that the work is carried out consistently and in accordance with agreed best practice.
7. Consideration should be given to carrying out advance assessment and planning of core capacity requirements for surveillance and response (IHR, Annex 1A) and points of entry (IHR, Annex 1B), which would result in the development of a national action plan by 15 June 2009 and its implementation to ensure that core capacity is in place throughout the country by 15 June 2012.

### ***Institutional framework***

8. The Ministry of Health is advised to consider appointing one person as the Health Crisis Coordinator, as experience has shown that an effective crisis management structure should preferably have only one focal point responsible for all health crisis preparedness planning.
9. The Special Emergencies Commission is advised to consider holding regular meetings to guide, oversee and develop comprehensive preparedness planning across the Ministry of Health.
10. The Special Emergencies Commission is advised to consider including activities related to crisis prevention and mitigation in its agenda in the future.

### ***Essential tasks***

11. The Ministry of Health is advised to share crisis preparedness plans with its partners with the aim not only of developing trust but also of ensuring that all stakeholders know their roles and responsibilities.
12. The Ministry of Health is advised to oversee the development of a public information strategy, including materials, in conjunction with technical experts and to pre-determine the authority to disseminate the materials at all levels of government.
13. The Ministry of Health might consider implementing regular monitoring and evaluation of crisis preparedness plans to ensure that these are regularly tested, reviewed and updated to meet requirements.

### ***Partnerships***

14. The Ministry of Health and the Ministry of Emergency Situations are advised to consider defining their roles and responsibilities in health crisis preparedness and response and arranging regular meetings to improve the coordination of the activities that each considers essential in crisis preparedness planning. This would enable the Ministry of Health to build on the existing relationships established by individual departments with other ministries, international organizations and NGOs, possibly developing these to form an official framework for multisectoral cooperation in preparedness for and response to health system crises.
15. The Ministry of Health is advised to consider undertaking an inventory of potential NGO partners (including those in the private sector) and their resources, with a view to establishing collaborative agreements on the basis of what each organization has to offer (human resources, technical support, training, supplies and equipment) for crisis preparedness and response. This would avoid the under-utilization or duplication of existing resources.

### ***Management of human resources***

16. The Ministry of Health is advised to contemplate undertaking an extensive audit of the crisis and preparedness skills and experience of all health personnel, including doctors, nurses, paramedics, medical technicians, drivers, administrative staff, laboratory technicians, dispatchers, and specialists in media and communications. The audit could also be extended to include the following: public and private health organizations, NGOs, international organizations, the military, the police force, and civil defence. An audit would enable the organization of expertise for effective delivery (e.g. surge capacity) whenever necessary. It would also facilitate the identification of any gaps in skills that could be dealt with through training or recruitment.
17. Consideration should be given to carrying out a comprehensive training and education needs analysis to identify the skills required for the performance of specific tasks within health crisis preparedness and response.
18. The existing WHO public health crisis management training package should be utilized to guide the development of a national training curriculum for health crisis management.
19. The Ministry of Health is advised to consider developing health crisis preparedness guidelines and technical publications for distribution in the Ministry and among partners to ensure commonality of response.

### ***Data collection, analysis and reporting***

20. The Ministry of Health is advised to consider sharing its risk assessments among partners for comment and input. This would greatly enhance the crisis preparedness planning process for all stakeholders.
21. The Ministry of Health should propose linking their Emergency Operating Centre electronically with that of the Ministry of Emergency Situations to facilitate a rapid exchange of information in the event of a crisis.
22. The Ministry of Health is advised to consider developing a list of staff members for the Emergency Operating Centre, as well as their terms of reference, to ensure the effective use of the centre.
23. The Ministry of Health is advised to consider undertaking a review of its requirements in terms of laboratory personnel and equipment with a view to determining the gaps in processing time through lack of trained personnel and technical equipment.

### ***Medical supplies and equipment***

24. The Ministry of Health is advised to consider auditing the stores of supplies and equipment. Until this has been done, and an inventory management system is in place, the existence of out-of-date items cannot be ruled out.
25. The Ministry of Health might consider revising its procedures for contracting goods and services and establishing policies and agreements with partners on sharing resources in a crisis situation, which would greatly facilitate the allocation of supplies.

### ***Preparedness funding***

26. The Ministry of Health is advised to determine, through risk assessment, the appropriate percentages of the health budget for allocation centrally and in the regions to meet the requirements of the preparedness planning process on an annual basis.
27. The Ministry of Health is advised to consider making it a requirement for health facilities to purchase comprehensive insurance against hazards determined in a risk assessment, including events such as fire, flooding, structural collapse, or the like. Fast-track mechanisms for processing claims need to be negotiated with the insurance providers in advance.

### ***Contingency funding***

28. It is advised that consideration be given to the inclusion of a sufficient contingency fund in the Ministry of Health's budget specifically for response to a crisis situation. Contingency funding would be required to cover the main staffing needs and the procurement of essential supplies and services in the short-term for each scenario outlined in the risk assessment and based on historical data from past crisis. Administrative procedures to access and allocate contingency funding in a crisis need to be fast-tracked, flexible and transparent.

### ***Procedures, guidelines and protocols***

29. The Ministry of Health is advised to ensure that preparedness plans and service standards exist and that the plans are regularly tested, updated and available to all partners.
30. WHO and other partners should consider providing guidance materials and sharing lessons learned, good practices, etc., to support the preparedness planning process.

### ***Logistics, telecommunications and security***

31. The key problem areas in a crisis – such as transportation and warehouses for the storage of medical supplies, generators and fuel stocks – should be included in the preparedness plans of all health facilities and response teams.
32. A crisis telecommunications network from the local level to the new Emergency Operations Centre of the Ministry of Health should be available for the crisis response teams and compatible with the systems available in the Emergency Operations Centre of the Ministry of Emergency Situations. These systems need to be tested regularly, and Ministry of Health staff trained in using them as part of regular staff training and preparedness plan simulation exercises.
33. The Ministry of Health is advised to consider, together with the local authorities, developing security plans to protect the health facilities.

### ***Chemical safety***

34. An assessment of the existing infrastructure for the management of chemicals needs to be carried out as an important step towards systematically building national capacity in this area; and consideration should be given to applying for technical and financial assistance, for example, to United Nations Institute for Training and Research (UNITAR) and GEF.

35. Consideration should be given to appointing a focal point for the Strategic Approach to International Chemicals' Management so that Azerbaijan may become eligible to submit project proposals on chemicals' management to the Strategic Approach to International Chemicals' Management Quick Start Programme Trust Fund;
36. The Ministry of Health is advised to consider initiating the establishment of a poison-toxicology centre, as already foreseen in the BCA for 2008–2009 with WHO.

### ***Climate change***

37. Consideration could be given to the following proposed action in respect of climate change:
  - To conduct a national assessment of health risks related to climate.
  - To strengthen the Second National Communication to UNFCCC on health aspects of climate change.
  - To agree on a lead body to coordinate the public health preparedness for and response to climate change.
  - To review and strengthen the legal framework to allow official collaboration between meteorological services, the health sector and other sectors.
  - To define roles and responsibilities.
  - To set up clear lines of communication.
  - To strengthen existing disease surveillance systems to include climate-related health outcomes.
  - To identify and monitor risk groups.
  - To provide training and guidance for medical professionals and advice for the public on measures to be taken during extreme weather events, such as heat-waves, flooding, and drought.
  - To develop treatment protocols for climate-related health problems.
  - To coordinate the development of health promotion materials and a structured approval system.
  - To raising awareness among governmental departments, medical professionals and the public.
  - To maintain international and regional cooperation.
  - To set up a monitoring and evaluation mechanism.

## **Acknowledgements**

The WHO assessment team wishes to express its sincere appreciation to the Government of Azerbaijan including the Ministry of Health, the Ministry of Emergency Situations and the Ministry of Ecology and Natural Resources, and to all the national institutions and diplomatic missions, the United Nations agencies and the NGOs that gave their valuable time to interviews.

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**Annex 1**

**Assessment of health security and its management capacity in  
Azerbaijan, 28 November–8 December 2007**

Terms of reference of the assessment team

**1. Background**

Over the last two decades health security in Europe has suffered from continued and increasing threats from communicable diseases, natural disasters, large-scale accidents, conflicts, complex emergencies and the effects of climate change. Recent health crises such as avian influenza and the threat of a human influenza pandemic, the heat-wave of 2003, widespread flooding in 2007 and the political instability in parts of the WHO European Region, have served to highlight the need for countries to remain vigilant in ensuring that policies and procedures are in place to prevent or respond adequately to a wide range of crisis situations which threaten health security.

In Europe, developing policies and plans for crisis preparedness and response, is further driven by two key issues:

1. the introduction of the revised International Health Regulations, which came into force on June 15, 2007; and
2. the body of EU legislation relating to communicable disease surveillance and response, and environmental health, to which Member States must comply.

At the time of the assessment, 27 of the 53 countries covered by the WHO Regional Office for Europe are full members of the European Union, a further three countries have candidate status (Croatia, the former Yugoslav Republic of Macedonia and Turkey) while Albania, Bosnia and Herzegovina, Montenegro and Serbia are still in the process of negotiation. Furthermore, in 2004, with the objective of avoiding the emergence of new dividing lines between the newly enlarged EU and its immediate neighbours, and with a view to strengthening the prosperity, stability and security of all concerned, the EU offered neighbouring countries a privileged relationship, building upon a mutual commitment to common values (democracy and human rights, rule of law, good governance, market economy principles and sustainable development). Referred to as the European Neighbourhood Policy (ENP), and distinct from the accession process, this relationship applies to the EU's immediate neighbours by land and sea. The ENP countries which fall under the WHO European Region are Armenia, Azerbaijan, Belarus, Georgia, Israel, Moldova and Ukraine. Signatories to the ENP are bound by an agreed 'Action Plan' which sets out an agenda of political and economic reforms with short and

medium-term priorities, including harmonisation of the relevant legislation, including those related to communicable disease surveillance and response and environmental health.

The revised International Health Regulations (IHR), which came into force on 15 June 2007 have a broader scope than the previous ones, which focused on the notification of specific communicable diseases. States Parties are now obliged to assess and notify the WHO of any health event of potential international public health concern, irrespective of its cause (biological, chemical, radionuclear) and origin (accidental or deliberate release). The criteria against which to assess the international public health implications of any given event are detailed in the algorithm presented in Annex 2 of the Regulation. These include:

1. unusual or severe health-related events, which
2. may have a significant public health impact, which
3. may spread across borders and which
4. may affect the freedom of movement of goods or people.

Furthermore, States Parties are also requested to carry out, by June 2009, an assessment of their existing structures and resources in order to meet the minimum core capacities requirements for the implementation of the Regulations detailed in Annex 1. Minimum core capacity requirements refer to:

- (a) public health surveillance and response at community, intermediate, and national levels; and
- (b) points of entry (i.e. designated airports, ports and ground crossings).

## **2. WHO Regional Office for Europe**

In order to better support Member States in strengthening preparedness and response to both natural and man-made disasters, the WHO Regional Office for Europe is coordinating the development of a standardized assessment tool to evaluate priority health risks, the status of generic preparedness plans and the interoperability of public health crisis plans in selected countries. There is already a sound understanding and broad knowledge of preparedness capacity within the EU Member States, based on the work of the European Commission, the European Centre for Disease Prevention and Control and WHO. There is however, a knowledge gap regarding the capacity of countries falling under the ENP.

This initiative is therefore being implemented with support from the European Union as part of the ENP and funded through the European Public Health Alliance and the DG SANCO budget<sup>15</sup>. The EU recognizes that the process will contribute to improving the

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<sup>15</sup> Directorate-General for Health and Consumers – <http://www.epha.org/r/64>, accessed on 16 July 2008.

overall capacity of ENP countries to respond to public health emergencies through strengthened planning for and response to the health consequences of a wide variety of risks.

An expert working group, involving national and international experts, is developing the assessment protocols that will be tested and evaluated in three ENP countries (Armenia, Azerbaijan and Moldova). The results of the assessment will be shared with the relevant countries and used as a baseline for strengthening national preparedness and response plans in the future, with further support from WHO where indicated.

The Ministry of Health of Azerbaijan has kindly agreed to cooperate with WHO in developing this assessment tool and will host the second pilot study, scheduled to commence in late November 2007.

### **3. Objectives of the Mission**

1. To support the Ministry of Health of Azerbaijan in identifying strengths, weaknesses and gaps in current disaster preparedness and response plans and to develop a framework for developing country capacity and strengthening health security overall, including an IHR implementation plan.
2. To pilot and further develop a flexible tool for the assessment of country capacity for crisis preparedness and response with special reference to:
  - legal framework and institutional arrangements in place for the prevention and mitigation of, preparedness for and response to potential natural and man-made disasters, relevant in the country context;
  - compatibility of the national legal framework with the provisions of the revised IHR;
  - core capacity for IHR implementation;
  - capacity for dealing with a disaster involving the release (be it accidental or intentional) of chemical substances;
  - capacity to deal with emerging threats related to climate change, including increased morbidity and mortality from heat and heat-waves, floods and windstorms and communicable diseases (vector-borne, waterborne, and foodborne).
  - avian influenza and pandemic influenza.

The definition of a disaster in this context includes all natural and man-made events that affect health security, where local resources and/or expertise are

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overwhelmed and outside support is required to reduce the impact on morbidity and mortality. This definition therefore covers disasters at local, regional and national levels.

3. To share information and experiences with Azerbaijani personnel, other United Nations agencies, donor organizations and national and international NGOs involved in disaster preparedness and response activities throughout Azerbaijan.

### **3. Methodology**

A multi-disciplined team of six international experts will be deployed to Azerbaijan to carry out an assessment of the current status of disaster preparedness and response in the country. Areas of expertise include:

- generic disaster preparedness planning and response: legal framework and institutional arrangements;
- International Health Regulations;
- communicable diseases surveillance and response;
- environmental health and global warming;
- chemical safety.

The assessment will adopt an all-hazards multisectoral approach.

Structured and/or informal interviews will be carried out with key stakeholders, which in this context include:

1. the Ministry of Health and related departments;
2. other government ministries, in particular the Civil Defence (or other body with overall responsibility for disaster preparedness and response), the Ministry of Interior, the Ministry of Environment and the Ministry of Agriculture;
3. UN agencies and donor organizations;
4. national and international NGOs;
5. The military (in some countries this may not be possible for reasons of national security).

Two round-table meetings will be held to include all stakeholders: (a) at the beginning of the mission to develop a common understanding of the objectives of the mission and expected outputs; and (b) at the end of the mission to present results for clarification and gain consensus on conclusions and recommendations.

#### **4. Deliverables**

(a) To the Azerbaijan Ministry of Health

1. A comprehensive report highlighting strengths, weaknesses and gaps in the present planning framework for disaster preparedness and response in Azerbaijan.
2. Recommendations on and an implementation framework (or road map) for strengthening the Azerbaijan disaster preparedness and response system over the next 3–5 years, highlighting any technical support that may be required.
3. Recommendations for developing an IHR implementation plan.

(b) To the WHO European Office

A revised assessment tool. This will be further piloted in another ENP country, with funding from DG SANCO.

## Annex 2

### Members of the Assessment Team

#### ***WHO Regional Office for Europe***

Mr Stephen Bertrand  
Consultant, DPR (from 27 November to 8 December 2007)

Dr Nida Besbelli  
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Translator

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National Professional Officer, Disaster Preparedness Focal Point

### Annex 3

#### List of legislative documents in Azerbaijan related to disaster preparedness and response

No.	Document no.	Date	Source	Title
1.	511	29.12.2006	Decree of the President	On several issues connected with the function of the Ministry of Emergencies of Azerbaijan Republic.
2.	182	24.07.2006	Cabinet of Ministers	On several issues of connected with the organization and functioning of the State Agency on Material Resources of the Ministry of Emergencies of Azerbaijan Republic.
3.	183	24.07.2006	Cabinet of Ministers	On several issues connected with the organization and functioning of the State Water Rescue Service of the Ministry of Emergencies of Azerbaijan Republic.
4.	184	24.07.2006	Cabinet of Ministers	On several issues connected with the organization and functioning of the State Agency on Safe Operations in Industry and Mining Supervision of the Ministry of Emergencies of Azerbaijan Republic
5.	417	07.06.2006	Decree of the President	On approval of the list of competent government bodies prioritized for use of communication networks, constructions and means during emergencies or in a state of emergency” and on stopping or restricting this use or applying special regulations on the use of communications
6.	394	19.04.2006	Decree of the President	On approval of the Regulations pertaining to the Ministry of Emergencies of Azerbaijan Republic, the structure of the Ministry and the number of staff allowed.
7.	375	28.02.2006	Decree of the President	On the organization and functioning of the Ministry of Emergencies of Azerbaijan Republic
8.	1261	06.02.2006	Order of the President	On the appointment of Mr K.F. Heydarov to the post of Minister of Emergencies of the Azerbaijan Republic.
9.	1182	16.12.2005	Order of the President	On the establishment of the Ministry of Emergencies of Azerbaijan Republic



No.	Document no.	Date	Source	Title
10.	120	24.06.2005	Cabinet of Ministers	On approval of the funds allocated by the State to cover action required to alleviate the circumstances caused by declaration of a state of emergency, as well as the distribution of the funds allocated for operational and logistics support, including social payments and compensation to the citizens affected, coverage of temporary displacement of residents to safe territories and compensation to organizations for use of their property and expenditure of their resources.
11.	37	07.03.2005	Cabinet of Ministers	On approval of the "Order on the provision of medical services to disabled persons, the elderly, children, refugees, internally displaced persons, those with low incomes, those who have lost the breadwinner of the family, those with temporary homes, hospital patients, citizens affected during rescue operations in emergencies, people with HIV/AIDS, organ donors (in connection with surgical procedures to remove organs and (or) tissues); and medical, defectological and psychological assistance (service) to children with disabilities and children with mental or physical disorders".
12.	32	22.02.2005	Cabinet of Ministers	On approval of the "Order on provision of assistance in allocating living quarters, compensating for material losses, finding jobs and other necessary assistance to people affected by circumstances resulting from a state of emergency or in connection with the response measures taken to alleviate these circumstances or their consequences".
13.	175	19.1.2005	Decree of the President	On application of the Law of the Republic of Azerbaijan "On State of Emergency"
14.	90	19.07.2004	Decree of the President	On application of the Law of the Republic of Azerbaijan "On State of Emergency"
15.	681-IIQ	08.06.2004	Law of Azerbaijan Republic	On State of Emergency

## **Annex 4**

### List of bodies and organizations under the authority of the Ministry of Emergency Situations

Agency on Industrial Safety and Mountain-extractive Control

Aviation Unit

Capital Construction Department

Caspian Rescue Services

Central Department of the Ministry of Emergency Situations

Central Laboratory

Certification (attestation) Organization

Civil Defence Troops

Izotop Special Industry

Kinology Service

Management Center on Emergency Situations

Medical Services

Militarized Special Guard Services

Operation-Investigation Department

Regional Services

Science Manufacture Unit

Sport-Health Club

State Agency on Safety Control in Construction

State Agency on Material Reserves

State Fire Control Service

State Fire Defence Service

State Inspectorate for Small Ships

The State Water Rescue Service

Training Centre

Urgent Rescue Services

## **Annex 5**

### List of persons met

#### **Ministry of Health**

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