The term global health security is often used to describe preparedness for and response to serious health incidents that are cross-border in nature and that pose a risk to security, destabilize economies, disrupt social cohesion, and affect the critical business of government.

Key risks to global health security being addressed by governments and international bodies include chemical, biological, radiological and nuclear threats (CBRN) and the spread of pandemic influenza. Events that have influenced the global health security landscape include the 1995 sarin gas attack in the Tokyo subway, the 2001 mailing of anthrax spores through the United States postal system, the 2003 emergence of Severe Acute Respiratory Syndrome (SARS), the Pandemic (H1N1) 2009 and the accident at TEPCO’s Fukushima nuclear power station in Japan.

The Global Health Security Initiative provides an effective forum to convene representatives from member delegations to discuss current and future global health security concerns. The Initiative also works with other institutions to improve preparedness efforts worldwide, through better coordinated surveillance, detection and response efforts.

“We affirm our resolve as a group of Health Ministers/Secretaries representing diverse nations to, individually and collectively, take concerted actions to ensure the health and security of our citizens, and to enhance our respective capacities to deal with public health incidents.”

Ministerial Communiqué, 2001
GHSI: ORIGINS AND MANDATE

The Global Health Security Initiative (GHSI) is an informal network of countries that came together shortly after the September 11, 2001 attacks, to ensure exchange and coordination of practices within the health sector in confronting new threats and risks to global health posed by terrorism.

Members
Delegations of the GHSI include Canada, France, Germany, Italy, Japan, Mexico, the United Kingdom, the United States and the European Commission. The World Health Organization (WHO) serves as an observer.

Mandate
The mandate of the GHSI is to undertake concerted global action to strengthen public health preparedness and response to the threat of international CBRN terrorism. In 2002, pandemic influenza preparedness and response was included in the mandate, given the linkages of this issue to health security. Lessons learned from a range of incidents, including both intentional and naturally-occurring events, inform work undertaken in support of this mandate.
GHSI: STRUCTURE

Ministerial Meetings: The annual meeting of health ministers fosters dialogue on topical policy issues and sets directions for the Initiative.

Global Health Security Action Group: GHSAG brings together senior officials from each delegation to ensure that ministers’ plans and objectives are translated into concrete actions and to serve as a network of rapid communication in the event of a crisis. GHSAG members exchange information regarding global health security issues, discuss policy priorities for the network, review progress on technical-level activities and assist in the preparation of Ministerial meetings.

Technical/Scientific Level: Working Groups

The Risk Management and Communications Working Group is responsible for CBRN risk management planning, threat and risk assessment, emergency communications, and policy collaboration in areas such as medical countermeasures. The Working Group includes a Communicators’ Network, which was established to develop and integrate effective risk and crisis communications strategies into risk management.

The Global Laboratory Network is involved in promoting quality assurance in diagnostics, flexibility and adaptability of techniques and technologies and addressing issues regarding transport of specimens.

The Chemical Events Working Group is involved in the risk prioritization of chemicals, the identification of research needs and best practices in the area of medical countermeasures, as well as other cross-hazard projects such as early alerting and reporting.

The Radio-Nuclear Threats Working Group works in collaboration with other radiation protection and nuclear safety authorities on emergency preparedness, undertakes projects in areas such as countermeasures and laboratory mapping, and serves as an informal communication network during emergencies.

The Pandemic Influenza Working Group is responsible for sharing and comparing respective national approaches to pandemic preparedness, including vaccine and anti-viral stockpiling and use, surveillance and epidemiology, diagnostics, and public health measures. During the H1N1 Pandemic, the Working Group coordinated the regular exchange of information among GHSI members on the status of the pandemic response.

The GHSI Secretariat is responsible for meeting planning, horizontal coordination and integrated priority-setting across the initiative, which includes management of the committee of Working Group Chairs and Delegation Liaisons.
KEY ACCOMPLISHMENTS & ONGOING ACTIVITIES

By providing a forum for countries to engage in dialogue, generate new knowledge, share best practices, and exchange preparedness approaches, the GHSI has helped to inform the efforts of national governments aimed at advancing health security. Working collaboratively through the GHSI has also enabled governments to build a stronger scientific evidence-base, and to utilize national resources in a more effective manner.

In the international realm, the Initiative has acted as a forum for cooperation and dialogue on health security matters. Through cooperation with other international bodies including the World Health Organization, the GHSI has made valuable contributions to advancing work on global health security beyond the group’s membership. Participation in the GHSI has also positioned member governments to more actively engage and play a leadership role within their respective regions on health security-related matters.

- The assessment of threats and risks is a foundational element which allows GHSI members to link risk assessment to health preparedness efforts. Progress has been made in developing a common methodology for assessing threats and risks to inform priority-setting within GHSI through a systematic review of key threat agents. This includes increasing interaction between the security and health sectors, and identifying vulnerabilities in preparedness and response.

- Governments are placing considerable emphasis on the compilation of surveillance and reporting data that could offer early warning with respect to emerging incidents. In this regard, the GHSI continues to develop a common platform for early alerting and reporting, which is used for tracking public information and media sources and relaying critical information to decision makers.

- The GHSI network has improved the quality of analytical work in high-safety laboratories in areas such as electron microscopy, smallpox, anthrax, tularemia, Q fever and plague. Strengthening global laboratory capacity has emphasized external quality assurance, as well as best practices in detection, diagnosis and transportation.

- The lessons learned from a GHSI exercise led to the creation of a 24/7 Emergency Contact Network in order to improve international communications capabilities among health officials in the event of a critical incident or health emergency.
• Establishing a strategic **risk and crisis communications** process is part of an effective preparedness and response strategy. This has included guidelines for generic risk communications; specific strategies to address communications needs for key threat agents; and policy papers on best practices in risk communications, communications challenges in uncertainty, and the role and influence of social media in public health emergencies.

• **A Risk Incident Scale** was designed by the network for communications among governments to share information on the gravity, magnitude and immediate impacts of a CBRN incident.

• **Medical countermeasures**, especially therapeutics and vaccines, are viewed as a critical tool for the health sector in containing and mitigating the spread of a threat agent during an incident. The development of a sustainable global infrastructure for medical countermeasures provides a broad framework for the GHSI’s work in this area. This has included sharing information on research and development and exploring collaborative opportunities related to specific products, as well as discussing regulatory and logistical issues associated with stockpiling and deployment.

• Ensuring GHSI countries have access to a global evidence-base with respect to **CBRN human decontamination** capabilities has also been a priority for the network. This has included sharing current research among member delegations, developing and disseminating best practices and converging practice and interoperability.

• GHSI members have recognized the importance of collaborating with the WHO in strengthening global health security, including through the implementation of the **International Health Regulations (2005)**. By promoting the uptake and dissemination of outcomes from GHSI activities, and by sharing technical information on IHR implementation among members, the network has been able to contribute to this broader objective and will continue its collaborative efforts in support of IHR implementation globally.

• **Smallpox** was the object of considerable activity in the early stages of GHSI, and it remains an issue of continuing attention. Collaborative efforts to address smallpox have included a unique international exercise (Global Mercury), and support given to the WHO Secretariat, particularly in the field of planning for the potential need for vaccination.

• In 2009, the GHSI proved to be highly valuable in facilitating the timely sharing of information for the response to **Pandemic (H1N1) 2009** and to support national decision-making. The GHSI also facilitated relationships that led to international collaboration in the early days of the outbreak, as well as throughout the pandemic. Lessons learned from the H1N1 pandemic have continued to inform both the generic preparedness and pandemic planning efforts of GHSI members.
Over the past ten years, the GHSI has provided Ministers, Senior Officials and technical experts with a trusted forum to engage in open discussion on health security issues. The relationships developed through this forum have been an asset to health ministries in advancing work on health issues at home and abroad. For example, members have regularly shared information during critical health-related incidents, such as the Fukushima nuclear accident and the outbreak of *Escherichia coli* in Germany in 2011.

The GHSI has regularly identified cross-national needs for capacity-building among technical staff, and has met those needs through workshops and training sessions. Inter-governmental sharing in emergency preparedness, joint training and planning have formed the core of the technical cooperation that has taken place under GHSI.
COOPERATION BEYOND THE GHSI

Health security is a core aspect of the mandate of a number of international and regional organizations. This section outlines the efforts of some of these organizations and identifies potential areas for collaboration with the GHSI.

**World Health Organization**

As an international organization and the specialized agency of the United Nations for health, the WHO serves as an observer to the GHSI. The efforts of the GHSI are well aligned with the health security issues being addressed through the WHO. These include: the implementation of the International Health Regulations by member states; international cooperation in outbreak surveillance, alert and response; transparency and sharing of knowledge, technologies and materials, including laboratory samples and viruses; improvement in public health infrastructure; and increased national and international resources for training, surveillance, laboratory capability, interconnected response systems and prevention.

The GHSI will continue to work with the WHO to support common priorities for global health security.

**European Union Health Security Committee**

The European Union Health Security Committee is an advisory body comprised of representatives of Health Ministers from the 27 EU Member States and the three countries of the European Economic Area. It is chaired by the European Commission. Its mandate is to share information and experience on preparedness and response to health-related threats from acts of terrorism or any deliberate release of biological or other agents as well as pandemic influenza, and to advise Health Ministers and the European Commission services.

**International Atomic Energy Agency**

The IAEA is the world’s centre of cooperation in the nuclear field. The Incident and Emergency Centre (IEC) of the IAEA is the global focal point for international preparedness and response to nuclear and radiological safety or security related incidents, emergencies, threats or events of media interest. In this role, the IAEA IEC facilitates prompt international notification, information exchange and cooperation as well as international assistance when the capabilities of States might be exceeded. The GHSI and IAEA work together in these areas.

**Nuclear Energy Agency**

The NEA is a specialized agency within the Organisation for Economic Co-operation and Development. The mission of the NEA is to assist its member countries in maintaining and further developing, through international co-operation, the scientific, technological and legal bases required for the safe, environmentally friendly and economical use of nuclear energy for peaceful purposes. The NEA assists the GHSI in collecting information addressing human health risks associated with radiological and nuclear threats.
FUTURE PERSPECTIVES

The nature of health security continues to evolve in a number of important ways, giving rise to new challenges. These emerging challenges illustrate the need for governments to remain vigilant in their preparedness and response, and to strengthen efforts for international cooperation.

Governments have placed increasing emphasis on preparedness and response strategies that build on an “all hazards approach”. This approach promotes the use of common platforms to address a variety of diverse health threats and risks.

Since its inception in 2001, the value of the GHSI partnership has been demonstrated through timely information exchange and effective networks, resulting in strengthened capacity and decision-making related to CBRN threats and risks.

As health security continues to evolve, the GHSI’s preparedness and response activities will remain adaptable to changing threats and to the changing health security landscape.