

Enhancing health security

EU support to protect EU citizens from potential threats to health

The health of EU citizens could be affected by a range of natural and human-driven threats, including pandemics, emerging communicable diseases, major chemical incidents and environmental events. To safeguard population health, EU-funded projects are strengthening early warning and communication systems, improving emergency responses and enhancing the preparedness of health systems for emerging public health threats.

Threats to health security

Threats to population health can emerge from multiple sources, including natural disasters, emerging or current pathogens, and chemical or environmental incidents.

As well as traditional 'chemical, biological, radiological and nuclear' (CBRN) threats, climate change and extreme weather are now also widely recognised as having an impact on health.

Importantly, these threats to health do not respect national borders, and a weak response in one country could exacerbate the situation of its neighbours. Hence, effective prevention and response must be Europe-wide and coordinated.

Surveillance and monitoring systems can provide early warning of impending threats to health, enabling steps to be taken to forestall them before they have major impact. Indeed, preparedness occupies a central role within health security in Europe.





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Number of countries affected by SARS (severe acute respiratory syndrome) in 2002-2003. The outbreak led to more than 8 000 cases and 775 deaths before it was brought under control through concerted international efforts.

EU action for enhancing protection

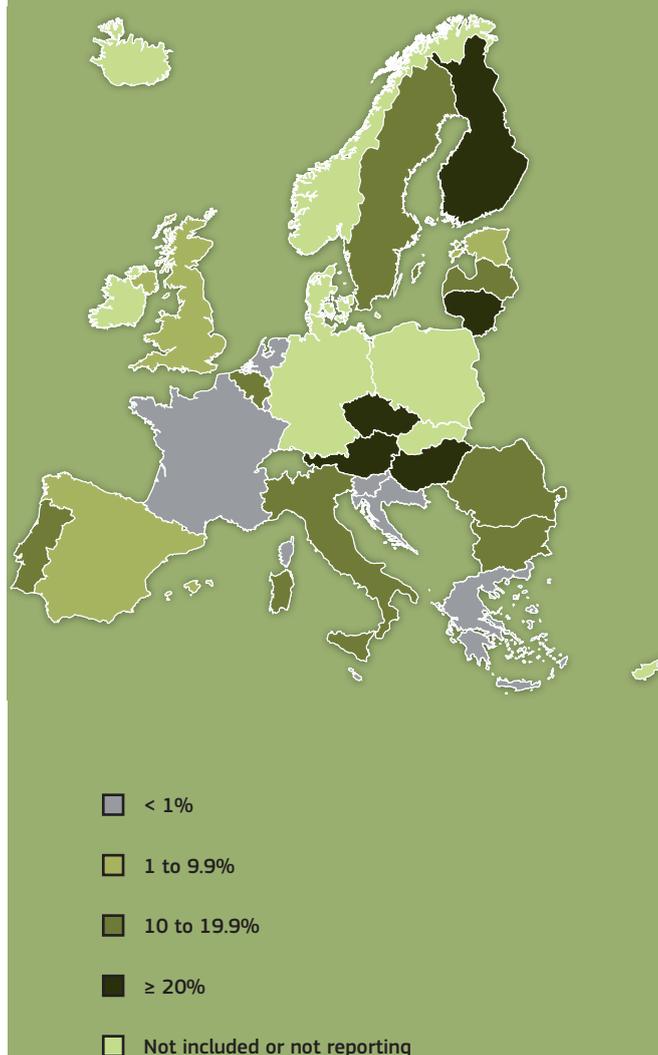
Article 168 of the 2007 Lisbon Treaty provides the EU with new powers to address preparedness for and responses to serious cross-border threats to health, and to strengthen the capacity to coordinate actions to address current health emergencies and future risks.

In 2009, a Communication on 'Strengthening Chemical, Biological, Radiological and Nuclear (CBRN) Security in the European Union' established the EU CBRN Action Plan. In 2013, the EU adopted new legislation on cross-border threats to health (Decision No 1082/2013/EU), to improve preparedness across the EU and strengthen the capacity to coordinate responses to health emergencies. The Decision has four major aims: to strengthen preparedness planning; to improve risk assessment and management of cross-border health threats; to facilitate joint procurement of medical countermeasures; and to enhance the coordination of EU-level responses by providing a solid legal mandate to the Health Security Committee.

Improving citizens' health security was a core aim of the second EU health programme (2008-2013), while the third EU health programme launched in 2014 has an overarching objective, namely to 'protect Union citizens from serious cross-border health threats'.

The programme's actions contribute to all three key areas of health security, prevention, preparedness and response. European networks of collaboration supported the sharing of information and expertise, and the dissemination of best practice — building systems and capacity to ensure coordinated and effective detection of and response to health threats.

Proportion of cases of multidrug-resistant TB that were extensively drug-resistant (XDR) TB in 2012.



Source: ECDC (Tuberculosis surveillance and monitoring report 2014 — surveillance findings)

Assessing strategies to combat influenza

Project name: Cost-effectiveness assessment of European influenza human pandemic alert and response strategies (**FLURESP**)

Number of partners: 9 from 7 countries: ES, FR, IT, HU, PL, RO, UK. **EU funding:** €699 220. **Duration:** 36 months.

The FLURESP project developed innovative methodologies to evaluate the effectiveness and cost-effectiveness of

different strategies to combat pandemic influenza using a multi-criteria model.

It modelled possible pandemic scenarios and control strategies across a range of EU countries, using the results to develop guidelines for prioritising response strategies to an influenza pandemic.

It has also produced an online prioritisation tool enabling users to evaluate and rank possible control strategies according to criteria such as performance, cost and cost-effectiveness.

Visit: www.fluresp.eu

Minimising the impact on public health of chemical-related, serious cross-border threats

Project name: Alerting, surveillance and reporting system for chemical health threats, phase III (**ASHT phase III**)

Number of partners: 7 from 7 countries: CZ, DE, FR, IT, LT, NO, UK. **EU funding:** €497 760. **Duration:** 30 months.

The ASHT phase III project aims to enhance risk management in order to minimise the impact of cross-border chemical incidents on public health, and strengthen risk assessment in order to coordinate cross-border responses.

It is further developing the Rapid Alerting System for Chemical Health Threats (RASCHEM) and promoting its use across the EU, thereby ensuring that countries link their expertise in chemicals and poison centres at EU level.

It is also promoting closer collaboration between relevant authorities, both within and between countries, and with the European Commission, in order to improve detection, reporting and coordination of responses to chemical incidents.

Visit: www.asht.eu/



Safer maritime transport

Project name: The impact on maritime transport of health threats due to biological, chemical and radiological agents, including communicable diseases (**SHIPSAN ACT** Joint Action)

Number of partners: 14 from 10 countries: BG, DE, IE, EL, ES, IS, IT, LT, SI, UK. **EU funding:** €1 799 942. **Duration:** 39 months.

The SHIPSAN ACT Joint Action works to prevent, detect and assess serious cross-border threats to health caused by communicable diseases and chemical and other biological agents during maritime and inland transport, and to link with existing mechanisms for response coordination.

SHIPSAN ACT facilitates the implementation of legal requirements of the EU and IHR (2005) for ships reporting from ports of member countries, by supporting the implementation of the Maritime Declaration of Health. SHIPSAN has developed a risk assessment tool for occupational health on ships (OiRa), in collaboration with the EU Safety and Health at Work Agency. SHIPSAN ACT has carried out training courses for port health officers and ship operators, officers and crew and a survey on training needs related to core capacities at port points of entry in the EU.

Visit: www.shipsan.eu/



Developing health system capacity

Project name: Support to health security, preparedness planning and crises management in European Union (EU), EU accession and neighbouring (ENP) countries

Number of partners: Direct grant to WHO. **EU funding:** €720 000. **Duration:** 36 months.

The European Commission and WHO Regional Office for Europe collaborated on a joint project to develop tools to enable EU and neighbouring countries to systematically assess the capacity of their health systems to respond to crises and emergency situations.

Emergency situations place extra stresses on health systems. However, advanced planning can enable systems to absorb extra demands at times of crisis.

The project developed a toolkit for assessing health-system capacity for crisis management and an associated assessment form. Piloted in seven countries, the tools provide practical guidance on the assessment and development of plans to enhance preparedness for emergency situations.

Visit: <http://bit.ly/ZcWXZH>



Quality assurance of highly infectious pathogen detection

Project name: Quality assurance exercises and networking on the detection of highly infectious pathogens (QUANDHIP Joint Action)

Number of partners: 34 from 21 countries: BE, BG, CZ, DK, DE, EE, EL, ES, FR, IT, LV, LT, HU, NL, NO, AT, PL, PT, FI, SE, UK. **EU funding:** €3 315 982 **Duration:** 39 months.

Extending the lessons learnt from two EU-funded networks (EUP4Lab and EQaDeba), QUANDHIP is reinforcing Europe-

wide capacity to identify highly pathogenic bacteria and viruses, establishing a permanent network of expert diagnostic laboratories spanning over 20 countries.

To build capacity, the network is exchanging best diagnostic practice, organising quality assurance exercises and specialist training and developing operational procedures to ensure coordinated responses to highly infectious cross-border pathogen outbreaks, such as the recent events connected with Lassa fever and anthrax (2012), MERS-CoV (2013) and Ebola (2014).

Visit: www.quandhip.info

Networking the Mediterranean

Project name: A network for the control of public health threats and other bio-security risks in the Mediterranean region and Balkans (EpiSouth Plus)

Number of partners: 15 from 10 countries: BG, EL, ES, FR, HR, IT, CY, MT, RO, SI. **EU funding:** €900 000. **Duration:** 33 months.

Building on the EpiSouth project's network of 27 EU and non-EU countries, EpiSouth Plus has strengthened countries' capacity to cope with health threats through coordinated capacity building.

Within the framework of IHR (2005), it established a Mediterranean Regional Laboratories network and promoted training on common procedures in generic preparedness planning. EpiSouth Plus has created and tested an emergency preparedness and response planning tool (EPREP) and simulation exercise to assess the interoperability of national emergency plans.

It has enhanced early warning systems, so information is shared more effectively regionally and with European systems, through the EPIS platform developed with the ECDC. It has also produced guides to IHR implementation, emphasising reporting between ports of entry and national health systems.

Visit: www.episouthnetwork.org/



Find out more

Directorate-General for Health and Consumers (DG SANCO)
ec.europa.eu/health/preparedness_response/policy/index_en.htm

Consumers, Health and Food Executive Agency (Chafea)
ec.europa.eu/chafea/index.html

Database of actions co-funded under the EU health programmes
ec.europa.eu/chafea/projects/database.html

