



INAMI-RIZIV

# **Detection and surveillance of infectious diseases: some lessons learned “post” COVID-19**

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## International Health Regulations (IHR) Protecting people every day

### What are the IHR?

The International Health Regulations (IHR) represent an agreement between 196 countries, including all WHO Member States, to work together for global health security. Under the IHR, all countries must report events of international public health importance.



We share a responsibility to protect our world from outbreaks of infectious diseases and other health threats. The goal of the IHR is to stop events in their tracks before they become international emergencies.

Source: Report to the Director-General of the Review Committee on Second Extensions for Establishing National Public Health Capacities and on IHR Implementation, November 2014



- Joint External Evaluation report, 2017: “The JEE team concluded that Belgium has very good, efficient capacities to detect, assess, notify and respond to major public health events, and to participate actively in efforts to strengthen IHR capacities.”
- General attention points
  - One health perspective
  - Stewardship with regard to AMR, zoonotic diseases and food safety
  - Immunization coverage and vaccine hesitancy
  - Public health professions workforce development



<b>National laboratory system</b>	D.1.1	5	<ul style="list-style-type: none"><li>• Strengthen timely linkages between clinical, epidemiological and laboratory information for public health purposes (e.g. by ensuring standardized data formats throughout the framework of e-Health)</li></ul>
	D.1.2	4	<ul style="list-style-type: none"><li>• Develop and implement national guidelines for requesting microbiological tests for specific pathogens and syndromes (e.g. severe pneumonia, severe diarrhoea, suspected meningitis)</li></ul>
	D.1.3	4	<ul style="list-style-type: none"><li>• Establish agreements for testing with national or international Biosafety Level 4 laboratories of neighbouring countries</li><li>• Continue to ensure regular and timely updates of the “practical directives” issued by commissions (e.g. for clinical biology or pathological anatomy) and used for the laboratory licensing procedure, following updates to the International Organization for Standardization (ISO) norms to reflect progress in laboratory technology (or to assist laboratories in implementing new ISO norms)</li></ul>
	D.1.4	4	<ul style="list-style-type: none"><li>• Prepare all Belgian laboratories for possible future mandatory accreditation, by increasing quality requirements and enlarging the numbers of available External Quality Assessment (EQA) schemes to face new emerging techniques.</li></ul>



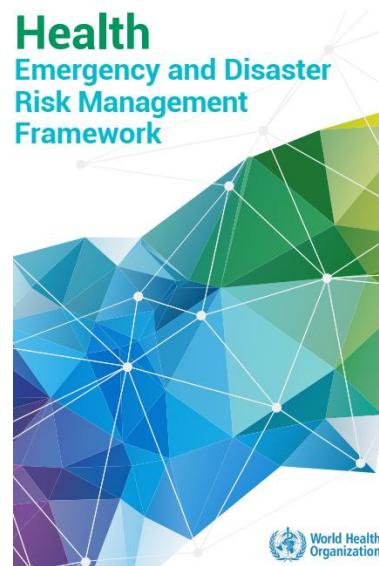
<b>Real-time surveillance</b>	D.2.1	4	<ul style="list-style-type: none"><li>• Facilitate data sharing between various health databases at all levels, to strengthen capacities for early threat detection, assessment and quantification of impact</li><li>• Further expand syndromic surveillance, particularly through use of data from hospital emergency wards</li><li>• Agree on a legal framework to strengthen current surveillance systems, maximizing the use of e-Health systems and addressing data protection issues.</li></ul>
	D.2.2	4	
	D.2.3	5	
	D.2.4	3	
<b>Reporting</b>	D.3.1	5	<ul style="list-style-type: none"><li>• Enhance awareness of the requirements of the IHR (2005) and the OIE at all levels and among all actors (hospitals, physicians, veterinarians, industry, airlines etc.), through multisectoral discussions</li><li>• Harmonize the reporting templates used by different sectors at all levels (human and animal health, food safety), and strengthen cooperation with stakeholders</li><li>• Promote timely data analysis and publication of relevant findings (e.g. in scientific articles), to improve awareness further and strengthen timely reporting.</li></ul>
	D.3.2	5	



- Back to the start
  - How did we detect COVID-19 in Belgium?
- Building up better detection and surveillance
  - Testing capacity and test-and-trace capacity
  - Sectoral and clusters analysis
  - Use of the healthcare system
  - Mental health of citizens and care providers
  - Motivational aspects
- Keeping it up – how long and how?
  - Consolidation and integration
  - Cost-effectiveness



- Specific attention points
  - Strategic piloting of surveillance system: what do we need to follow? What's nice to have?
  - Integration of COVID-19 in the existing surveillance systems?
  - What are instruments we need to set up? Compulsory and voluntary registration systems, surveillance networks, etc. What's cost-effective?
  - Stable financing by competent authorities
  - Organizational and regulatory aspects: primary care, hospitals sector, labo sector and role NRL, etc.
  - International context: role ECDC
- Use and impact of surveillance



## COMPONENTS AND FUNCTIONS OF HEALTH EDRM

5.1 POLICIES, STRATEGIES AND LEGISLATION

5.2 PLANNING AND COORDINATION

5.3 HUMAN RESOURCES

5.4 FINANCIAL RESOURCES

5.5 INFORMATION AND KNOWLEDGE MANAGEMENT

5.6 RISK COMMUNICATIONS

5.7 HEALTH INFRASTRUCTURE AND LOGISTICS

5.8 HEALTH AND RELATED SERVICES

5.9 COMMUNITY CAPACITIES FOR HEALTH EDRM

5.10 MONITORING AND EVALUATION



### ▼ **EARLY WARNING AND SURVEILLANCE**

- Indicator-based surveillance
- Event-based surveillance
- Multi-hazard early warning systems
- Early warning for different hazards
- Public health laboratories, diagnostics, characterization
- Epidemiological investigations.