

WORKING PROCESS OF THE RISK ASSESSMENT GROUP

Update June 2020

1. Background

In order to be prepared to respond to the growing and varied public health risks resulting from travel and trade but also to the nowadays capacity to spread news, WHO and EU commission have respectively expanded the scope of their legislation (International Health Regulations (2005) and decision N° 1082/2013/EU on Serious Cross Border Threat to Health). The scope is now based on the concept of 'event (risk with potential for crisis situation)' including also the potential impact at European and international levels.

Under this new framework, in 2007, Belgium has designed an organisational model allowing to detect, assess, notify and control potential public health hazard.

2. Description

As described in the protocol of agreement published on 11/03/2008, the Belgian system is based on a triad of actors: 1) the National Focal Point responsible for international notification; 2) a Risk Management Group (RMG) composed of representatives from the ministries of health and entitled to decide on the notification and on the control measures; 3) a Risk Assessment Group (RAG) composed by permanent representatives from the health authorities and epidemiologists of Sciensano. The RAG coordinators may invite ad hoc experts. The RAG conducts daily surveillance of potential health threats, based on epidemic intelligence activity and systematic decoding of signals identified through epidemiological surveillance. When needed, a risk assessment is prepared and propositions for actions to be implemented are made. Once these are adopted by the RMG, the RAG also has to ensure the post-assessment phase by monitoring the event for its acute public health impact and by evaluating the intervention and identifying lessons learned. The RAG is coordinated by the Belgian Institute for Health (Sciensano).

Initially put in place for events with potential international concern, the triad mechanism has been proven useful also for events occurring nationally. Therefore, in 2014, its mandate has accordingly been officially enlarged to health threats of national concern (protocol of agreement in 07/2014).

Last legal document : 5 NOVEMBRE 2018. - *Protocole conclu entre le Gouvernement fédéral et les autorités visées aux articles 128, 130 et 135 de la Constitution, établissant les structures génériques pour la gestion sectorielle santé des crises de santé publique et leur mode de fonctionnement pour l'application du Règlement Sanitaire International (2005), et la décision n° 1082/2013/UE relative aux menaces transfrontières graves sur la santé.* 5 NOVEMBER 2018. - **Protocol gesloten tussen de Federale Overheid en de overheden bedoeld in artikelen 128, 130 en 135 van de Grondwet, tot vaststelling van de generische structuren voor het sectoraal gezondheidsbeheer van crisissen voor de volksgezondheid en hun werkwijze voor de toepassing van het Internationaal Gezondheidsreglement (2005), en Besluit nr. 1082/2013/EU over ernstige grensoverschrijdende bedreigingen van de gezondheid.**

3. Types of assessment

The need of documented assessments is increasing but the required level of evidence is event-dependent. Also considering the complexity, the uncertainty and the possible dispersion of information, different kinds of assessments are proposed :

1. **Rapid Signal Assessment (RSA)**: daily work based on epidemic intelligence activity, systematic decoding of signals by epidemiological opinion based on field expertise. The relevant signals are published in the RSA tool of Epistat: <https://www.wiv-isp.be/Epidemio/epistat/RSA.aspx>. The access to the platform is limited to the RAG coordinators and the health authorities who also have the right to write in the system. Once the signal assessed, the assessment can be closed or lead to one of the following three levels.
2. **Consultative Signal Assessment (CSA)**: consultation between permanent representatives of the RAG because 1/ the signal is complex, uncertain, 2/ there is the need to put in common existing information, 3/ the risk is known and a procedure to deal with it is in place but some elements are unusual. The objective is to evaluate if the signal is a risk with potential for a crisis situation. The consultation can be done by email or during a meeting. The CSA can be considered as a step in the work of the RAG before possibly opening the discussion to a PRA or ERA, or can be sufficient in itself.
3. **Primary Risk Assessment (PRA)**: when the signal can be a risk with potential for crisis situation (e.g.: risk known or urgent) requiring mobilisation of response capacities or identification of additional control measures, the RAG will perform a risk assessment and will consult experts by email consultation. A meeting can be organised when the signal can induce complex situations or when multiple partners must be involved.
4. **Evidence-based Risk Assessment (ERA)**: when the signal can be a risk with potential for crisis situation which is 1/unusual, 2/complex, or 3/on the long term, the RAG will perform an extensive risk assessment with a literature review, during a meeting with ad hoc experts.
5. Since the Legionella outbreak in Gent (May 2019) a new type of assessment has been developed : **Public health event assessment (PHEA)**. The event is ongoing and control measures are in place, but there is a need to evaluate the impact of these control measures in light of the epidemiological evolution. The objective is to assess if additional measures, researches, ... have to be put in place to control the hazard.

Except for ERA, when necessary, these assessments are ready within 24 hours.

N.B.: Risk assessments performed by European agencies are very valuable for Member States.

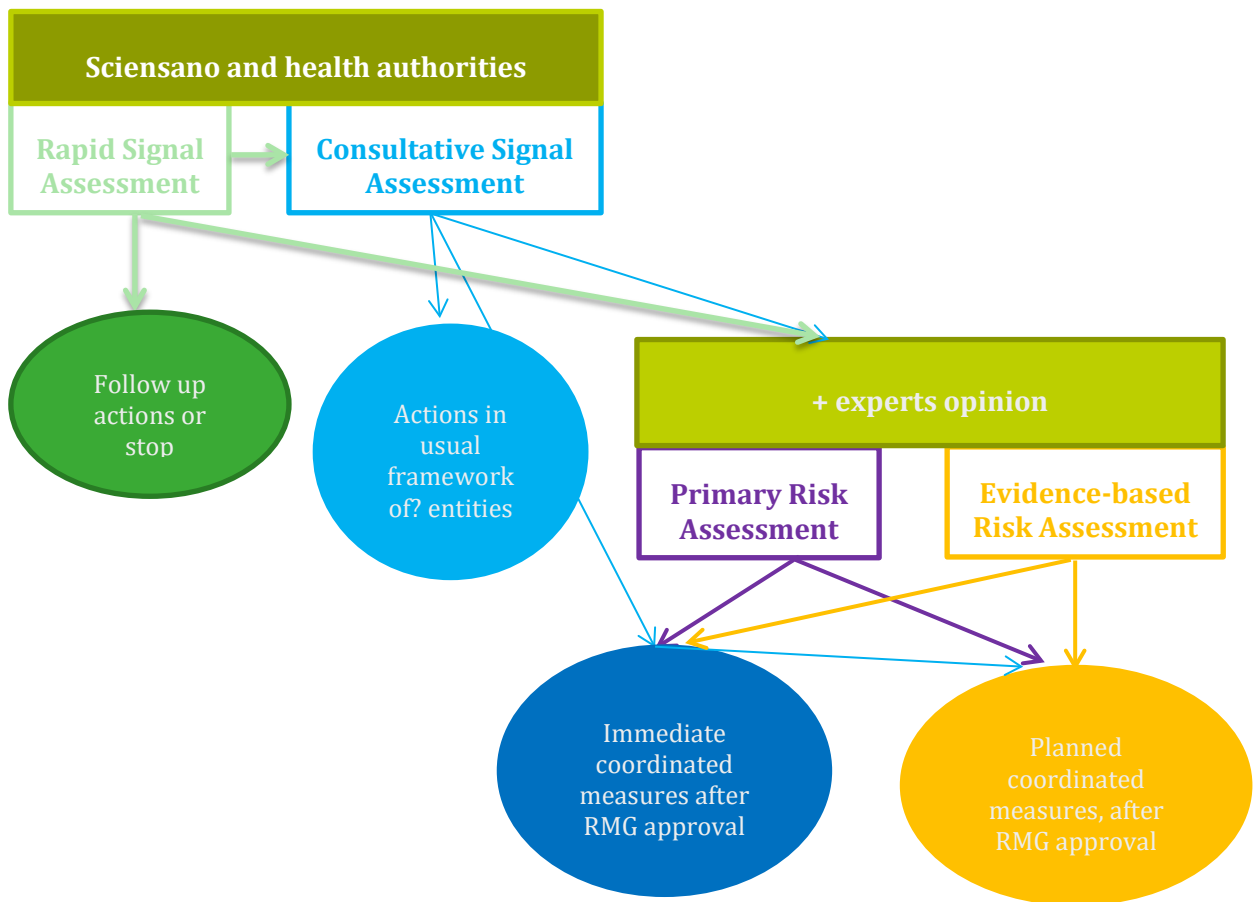
4. Decision flow

The RMG is composed of representatives of the ministries of health, and a common decision is not always necessary to manage a risk.

When a risk is assessed as requiring coordinated measures, when the management of the situation will require additional coordinated measures, or when supplementary resources are needed, ... a decision is taken by the RMG and implemented by each competent entity.

When a risk is assessed as requiring a reinforcement of existing strategy and capacities, then the management of the situation can be decided and implemented by the respective representatives of health authorities following the usual framework.

Flowchart describing the working process of the RAG



5. Definitions

Health threat detection systems allow the capture of signals on **hazard** (eg.: biological, chemical, environmental, ...) for health. The hazard is something that can cause harm in terms of morbidity and/or mortality.

Signal = any change in incidence, in time-place or persons characteristics, emergence of a new strain, emergence of new microbiological characteristics, products contamination, spread of chemical agents, environmental alterations, identified from indicator-based or event-based detection systems and signifying the occurrence of a potential threat.

Risk = the characteristics of the signal defining the capacity of a hazard to become an event with an impact on public health.

Event = risk with potential for crisis situation

Different kinds of events can be distinguished:

Threat = any ongoing hazard that can potentially become of risk for public health.

Example= H5N1

Episode = a number of persons is exposed to a hazard, over a defined period of time, with a limited geographical spread, imposing the activation of preventive and/or control measures and a medical response as already described in existing procedures.

Example: Measles outbreak

Incident = a person or a limited number of persons is exposed to a hazard, imposing the activation of coordinated preventive and/or control measures and a medical response as already described in existing procedures.

Example: MERS-Coronavirus

Crisis = a number of persons is exposed to a hazard, over a period of indefinite duration, imposing the implementation of coordinated additional/unusual preventive and/or control measures and adaptation of procedures and medical response.

Example: H1N1

Disaster = a defined number of persons – most often a large number - is exposed to a short- or long-term life threatening hazard at the same time, unexpectedly, in a particular place requiring the mobilization of emergency measures.

Example: dispersal of chemicals after a train derailment

Public Health Emergency of (inter)national concern= an event as defined in the IHR(2005) “an extraordinary public health event which is determined to constitute a public-health risk to other countries through the international spread of disease; and to potentially require a coordinated international response.”

Events can include infectious conditions and those related to biologic, chemical or radiologic exposures. The decision to activate this alert level is upon the WHO responsibility.