



# Guidelines for designing and implementing a syndromic surveillance system

## What are the objectives of the guidelines?

The Triple-S guidelines support the design, implementation and improvement of human and veterinary syndromic surveillance (SyS) systems.

Drawing on the experience of an expert network, the guidelines provide evidence-based recommendations and suggestions for each step of the set-up, use and assessment of a system. They aim to encourage a common understanding of the structure and utility of SyS systems, and improve communication among European countries on critical public health threats.

The guidelines are designed to be useful in the context of the wide range of health systems and data sources found in European countries, and their main principles can be applied globally.

## Who are the guidelines for?

The guidelines are intended for public health professionals and epidemiologists working in human or animal health surveillance who would like to use SyS to support existing surveillance systems and public health monitoring.

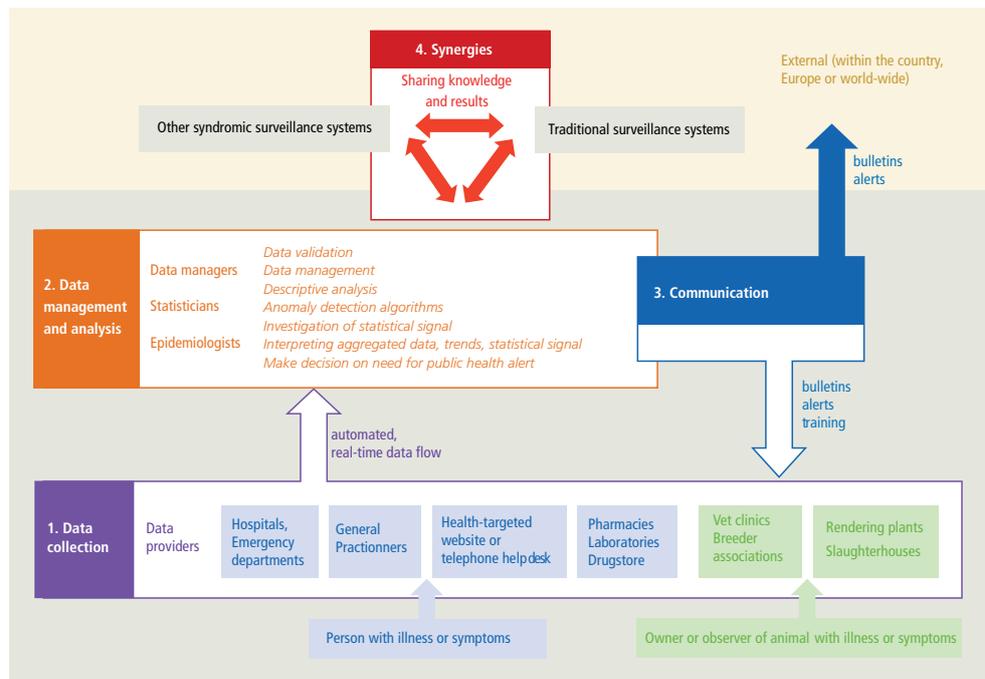
## What are the strengths of these guidelines?

**A practical tool** covering all steps of implementing a SyS system, providing:

- recommendations, key messages, check lists and minimum requirements for each step of the implementation and design of a system
- summarised information in tables, boxes and figures for quick reading and understanding

**User friendly** and illustrated:

- Systematic, concrete examples of European human and animal SyS systems, using an easy-to-identify colour code
- Specific requirements for surveillance of mass gatherings, based on the experience of the London 2012 Olympic and Paralympic games
- Numerous references to international peer review publications providing in-depth supporting information



### 1. Setting up a syndromic surveillance system

- Will syndromic surveillance meet my needs?
- Defining the purpose(s) of the SyS system
- Identifying and contacting key partners
- What human and financial resources are needed?

### 2. Data collection, preparation and provision

- Which data sources can I use? Which variables should I collect?
- Which coding system should be used?
- How should data be recorded, transmitted, centralized and aggregated?
- How can I ensure continuous access to data?
- How can I ensure data confidentiality, security and quality?

### 3. Data analysis

- Preparation of data for conducting the analysis
- Selection and implementation of an appropriate statistical method
- Investigation of the statistical signal to transform it (or not) into an alert
- Translation of the alert into public health action

### 4. Communication

- Why communicate?
- Which information for which stakeholders?
- What and how to communicate?
- Examples of SyS communication

### 5. Evaluation

- Why evaluate a SyS system?
- What should be evaluated? How should the evaluation be done?
- How should the results be interpreted

**Web:** [www.syndromicsurveillance.eu](http://www.syndromicsurveillance.eu) | **Email:** [info@syndromicsurveillance.eu](mailto:info@syndromicsurveillance.eu)