TRIPLE-S
Syndromic Surveillance Systems in Europe

FACT SHEET 1

What is syndromic surveillance?

It is important to be able to identify human or veterinary public health threats in order to take timely public health action. Syndromic surveillance is the (near) real-time collection, analysis, interpretation and dissemination of health-related data to enable the early identification of the impact – or absence of impact – of potential threats.

Syndromic surveillance is based not on laboratory-confirmed diagnosis, but on non-specific clinical signs, symptoms and proxy measures for health (for example absenteeism, drug sales and animal production collapse). These constitute a provisional diagnosis or syndrome. The data are usually collected for purposes other than surveillance and, where possible, are automatically generated to avoid imposing an additional burden on data providers. The motive for the development of syndromic surveillance was a need for the rapid measurement of population health in response to the emergence of diverse public health threats such as bioterrorism and severe acute respiratory syndrome (SARS).

In animal health, the definition of syndromic surveillance is less restrictive regarding the timeliness and automation of data collection and analysis. Timeliness and automation are perceived more as objectives, rather than inherent characteristics of syndromic surveillance systems.

What is its purpose and how does it add value?

Syndromic surveillance aims to identify an increase in illness before formal diagnoses are confirmed and reported to public health agencies. It also attempts to provide an estimate of the impact of incidents. It covers occurrences such as epidemics or pandemics, potential bio-terrorist attacks, major chemical incidents, natural disasters and climate extremes. Although syndromic surveillance tends to be non-specific it can be sensitive and rapid, and can augment and complement the information provided by laboratory-based surveillance systems.

The main aims of syndromic surveillance are to:

- Detect an unknown, unexpected or emerging human or animal health threat.
- Demonstrate the lack of public health impact of a known threat, i.e. provide reassurance.
- Quantify and monitor the impact of an identified potential public health threat.
- Detect the start of an expected event, for example a seasonal event such as influenza.

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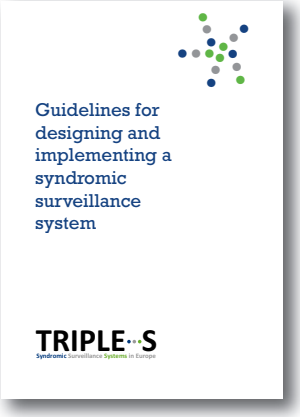
What are the Triple-S guidelines?

The Triple-S guidelines provide recommendations and suggestions for designing, implementing and improving syndromic surveillance systems. They use examples of short-term and on-going initiatives based on experiences in European Member States.

- The guidelines draw on the experiences of those working in many different types of systems at varying stages of development.
- While the guidelines have been drawn up for use in Europe, their main principles are valid globally.
- The guidelines are intended to provide a practical guide for developing syndromic surveillance systems and can be found together with a range of useful documents and information at www.syndromicsurveillance.eu.



Who are the guidelines for?

The Triple-S guidelines are intended for public health professionals and epidemiologists who use human or animal health surveillance as part of their work and want to develop syndromic surveillance systems.

Who developed the guidelines?

The guidelines were developed by the Triple-S project. Coordinated by the French Institute for Public Health Surveillance (InVS), the three-year project was launched in 2010. It involves a network of European public health professionals who have developed and worked with syndromic surveillance at various stages of implementation in their countries or those who have an interest in syndromic surveillance.

Web: www.syndromicsurveillance.eu | Email: info@syndromicsurveillance.eu

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