COACTION PUBLISHING

Inventory of syndromic surveillance systems in Europe by the Triple-S project

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Objective

The first results of the inventory of syndromic surveillance systems in Europe, conducted in the framework of the European project Triple-S, are presented.

Introduction

Triple-S (Syndromic Surveillance Survey, Assessment towards Guidelines for Europe) was launched in 2010 for a 3-year period (1). Co-financed by the European Commission through the Executive Agency for Health and Consumers, the project is coordinated by the French Institute for Public Health Surveillance (InVS) and involves 24 organizations from 13 countries. Both human and veterinary syndromic surveillance are considered.

Methods

Based on the definition of the U.S. Centers for Disease Control and Prevention (2), an updated definition of syndromic surveillance was developed, taking into account the evolution of syndromic surveillance in the past decade.

Further, an inventory of syndromic surveillance systems in Europe has been started. To identify human syndromic surveillance systems, a literature review was first performed using Pubmed and Google, identifying 40 relevant publications. A brief questionnaire was sent to Triple-S partners, the European Center for Disease Prevention and Control (ECDC) and other contact persons to identify existing, past, pilot and planned systems in the different countries and the reference person for each system. The reference persons were then asked to complete a long online questionnaire for collecting detailed information (e.g., objectives, data sources, timeliness, statistical methods for outbreak detection, reporting tools and response measures).

For the inventory of veterinary syndromic surveillance systems, a similar method was used. The brief questionnaire was sent to the European Food and Safety Agency (EFSA) focal points and chief veterinary officers of each Member State and to the members of the European College of Veterinary Public Health. Differently from the inventory of human systems, the veterinary inventory included mortality surveillance systems.

Eight site-visits to existing systems are scheduled between June 2011 and May 2012, e.g., United Kingdom, France and Denmark/Sweden. Open to 6–10 project partners and participants from all European countries, the visits offer an in-depth understanding of a variety of systems and facilitate knowledge transfer, through discussions on practical experiences with national and regional stakeholders (e.g., strengths and weaknesses of the systems, lessons learned from the operators and users and expectations of decision makers).

Results

The first output of the project was the adoption of the definition of human and animal syndromic surveillance.

The initial results from the inventory of syndromic surveillance systems and the geographical distribution of identified systems will be presented. As a result of the literature review and the responses to the brief questionnaire for human systems, 19 active systems, 11 pilot or planned systems and 4 systems for past mass gathering events since 2000 (e.g., Olympic games) have been identified to date. For veterinary systems, only 5 systems were identified by the literature review, whereas 16 active, 7 pilot and 2 expired systems have been identified by the brief questionnaires.

The first 4-day site-visit took place in the United Kingdom (Birmingham and Glasgow) in June 2011, where there are several systems based on different data sources: emergency departments, general practitioners (Q-surveillance, Piper and SISRS), phone calls to help lines (NHS Direct, NHS24), out-of-hours primary care and pharmacy prescription data.

By December 2011, four site visits have been conducted. The synthesis of the first visited systems, including their main characteristics and the experiences and lessons learned through those visits, will be presented.

Conclusions

Results from the inventory and the site visits will constitute the foundation for the development of guidelines for improving syndromic surveillance in Europe.

Keywords

Inventory of systems; syndromic surveillance definition; Triple-S project; site visits; Europe

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