

Online dissemination of national influenza surveillance data

Calvin KY Cheng, Eric HY Lau, Lai Ming Ho, Gabriel M Leung, Benjamin J Cowling
School of Public Health and Department of Community Medicine, The University of Hong Kong,
Hong Kong

OBJECTIVE

This paper describes a review of modes and styles of the online dissemination of national influenza surveillance data.

BACKGROUND

Infectious disease surveillance is important for disease control as well as to inform prevention and treatment [1]. While influenza surveillance data coverage and quality has improved significantly in recent years due to resource investments and advances in information technology, the need remains for improvements in data dissemination to the wider community.

METHODS

We searched online for national influenza surveillance websites for every country (220 in total) and reviewed the resulting sites where available. Literature about influenza surveillance was searched at MEDLINE for relevant links to related websites. Non-English websites were translated into English using human translators or Google language tools.

RESULTS

A total of 90 national influenza surveillance websites were retained for investigation. 81/90 (90%) of the websites were found in developed countries. 82/90 (91%) websites were in English. Laboratory surveillance data were included in 35/90 (39%) websites. The most common surveillance methods included influenza-like illness consultation rates in primary care settings (54/90, 60%), institutional outbreaks (17/90, 19%) and mortality due to pneumonia and influenza (16/90, 18%). Almost all websites (87/90, 97%) provided weekly or monthly influenza activity reports. Only 3/90 (3%) websites provided dynamic data retrieval functions for end users. Data interpretation and activity forecasting of these websites were often empirical.

DISCUSSION

Appropriate surveillance data dissemination is important to maximize the utility of collected data. Online surveillance data presented in an interactive graphical

interface may give timelier and clearer illustration of overall diseases activity than static periodical reports. Different audiences may prefer data to be presented in different ways, while raw data should be able to export in standard data file formats for further data processing. Incorporation of statistical algorithms to predict future disease activity may also increase the usefulness of surveillance data.

REFERENCES

[1] Stohr K. The global agenda on influenza surveillance and control. *Vaccine*, 2003; 21(16):1744-8.

Further Information:

Ben Cowling, bcowling@hku.hk <http://sph.hku.hk/ide>