Two articles in this issue of Eurosurveillance refer to the challenges of epidemic intelligence activities in European Union Member States.

Public health surveillance remains the cornerstone of the detection of health threats requiring public health action. The routine notification by health care providers or laboratories of patients presenting with a clinical picture meeting a case definition enables public health officers to implement public health measures to prevent further spread. At the European level, the Early Warning and Response System (EWRS) is a tool allowing mutual notification and exchange of information on threats detected in the European Member States that require co-ordination of public health measures among the EU Member States.

Internet-based tools (IBT) for epidemic intelligence have, over the past decade, led to the enhancement of traditional surveillance by accessing real-time information originating from the media, mailing lists and other internet sources (such as blogs and discussion fora). These IBT have provided those working in epidemic intelligence with a large amount of potentially useful information for the detection of threats.

However, the reliability and validity of the information provided by these sources remains a concern, and raises the question of whether national public health authorities should react and implement measures as a result of information gathered in this way. One epidemic intelligence tool, ProMED-mail, a global electronic reporting system for outbreaks of emerging infectious diseases and toxins maintained by the International Society for Infectious Diseases, is discussed in the article by Zeldenrust et al [1]. The authors examined the use of ProMED-mail by the Netherlands’ Early Warning Committee over a period of more than one year, and showed that in two instances ProMED-mail’s notification was timelier than any of the Early Warning Committee’s other sources, but did not lead to more prompt intervention.

At the EU level, the experience of the European Centre for Disease Prevention and Control (ECDC) in epidemic intelligence has shown that the European Early Warning and Response System (EWRS) remains by far the most timely notification process for health threats concerning several Member States. The added value of screening IBT is marginal for threats confined to the EU. However, IBT remain important and a basis for detecting international threats and allowing for enhancing preparedness in order to prevent or mitigate their emergence in the EU. The outbreak of chikungunya in Italy in summer 2007 is a good example: reports of large numbers of cases of chikungunya in India during the spring, reported through ProMed-mail, GPhin and other sources, led to the strengthening of EU Member States’ capacity to diagnose the disease, as well as chikungunya’s inclusion in the list of diseases under notification in countries where the vector is present.

For many years, public health surveillance had remained the main tool for the detection and response to public health threats. During the 1990s, with the increased trade and travel within the EU, the need for a mechanism for prompt notification among EU Member States has emerged (EWRS) and proven to be effective in ensuring the coordination of public health measures. Concomitantly, IBT have allowed those working in epidemic intelligence to enhance their capacity to recognize potential threats originating outside of the EU and their ability to anticipate and prepare for it. The two articles presented in this issue stress the need for a better understanding of the added value of IBT and for developing an EU network of epidemic intelligence contact points to use these tools in the most efficient way.