

Call for papers: special issue on the molecular epidemiology of human pathogens

***Eurosurveillance* invites authors to submit papers for a special issue on the molecular epidemiology of human pathogens.**

As exemplified in the 2011 outbreak of the Shiga toxin-producing *Escherichia coli* (STEC) O104:H4 strain in Germany, advanced sequencing technologies are being introduced for application in microbiological investigations supporting surveillance and outbreak investigations. In the STEC outbreak, the traditional microbiological methods were used to characterise the outbreak strain for epidemiological investigations, but for the first time, parallel application of advanced technologies enabled the whole genome sequence of multiple isolates of the outbreak strain to be determined just a few days after the outbreak had been detected. While such scientific and technological advances have great potential to increase the resolution and accuracy of microbiological investigations and deepen our understanding of human pathogens and the diseases they cause, various operational issues need to be resolved in order for such advanced techniques to be incorporated into public health practice.

The aim of this special issue is to provide a comprehensive picture of the current thinking on the role and possible opportunities of applying modern molecular microbiology for informing public health action. It follows from the recent consultation organised by the European Centre for Disease Prevention and Control (www.eurosurveillance.org/ViewArticle.aspx?ArticleId=20054), which initiated discussion on how public health can benefit from the recent advances in molecular microbiology. We invite interested scientists and public health experts to share their findings and views and submit original papers for peer review and possible publication.

Topics of interest include, but are not limited to:

- proof-of-principle examples of the use of advanced molecular methods, e.g. for the detection and characterisation of human pathogens (bacteria, viruses, fungi and protozoa) and for understanding infectious disease dynamics;
- issues related to the use of advanced molecular data on human pathogens for surveillance and outbreak investigation: future directions, potential limitations, needs and implications for public health.

The submission deadline is **15 May 2012**. If you would like to submit a paper or ask for more information, please see our instructions for authors and contact the editorial team at eurosurveillance@ecdc.europa.eu.

Eurosurveillance is a European peer-reviewed scientific journal devoted to the epidemiology, surveillance, prevention and control of communicable diseases, with a focus on such topics that are of relevance to Europe. It is a weekly online journal, published every Thursday, and features short rapid communications, longer in-depth research articles, surveillance and outbreak reports, reviews and perspective papers, as well as short news items.

Timely publication of short authoritative papers on ongoing outbreaks or other relevant public health events is one of the major assets of the journal.

The entire content is open access, free of charge for both readers and authors. All articles are indexed in the PubMed/MEDLINE, Scopus, EMBASE and EBSCO databases. The journal, which has well over 13,000 active subscribers, will receive its first Impact Factor in July 2012. www.eurosurveillance.org