

## **New Surveillance Tools developed – successful completion of the REACT project**

The REACT project has been created to support an improved and better coordinated response to the outbreak of infectious diseases – especially newly emerging infections - within the European Union. It has been funded through the Executive Agency for Health and Consumers (EAHC) within the EU Health Programme.

Under the lead of the Robert-Koch-Institute and the Gesellschaft für Internationale Zusammenarbeit (GIZ) in cooperation with the British Health Protection Agency (HPA), the Norwegian Institut for Public Health (NIPH) and the Polish Institute for Public Health (PZH), the project focussed on **four areas** of generic response which are crucial for the international cooperation on prevention and harmonized action:

1. Enhanced surveillance during mass gathering events,
2. Surveillance in Health Care Workers (HCW)
3. Implementation of International Health Regulations (IHR)
4. Contact tracing in public transport

The choice of the four areas of interest was by the observation that in these areas little is known or done and that existing international regulations for surveillance urgently need reinforcement for effective implementation, inspired

### **The results**

Three years of international cooperation have produced four tangible tools ready to be used by European public health institutions and experts in the field.

In the light of the upcoming EURO 2012 in Poland and the Ukraine a tool box of core surveillance capacities for mass gatherings has been developed. Subsequently a training module for “Surveillance of infectious diseases at mass gatherings” has been developed and piloted in Poland by the PZH. The module comprises a two-days training on:

- Characteristics of mass gatherings
- Planning framework for mass gatherings
- Surveillance systems
- Risk assessment
- Processing epidemiological information
- Outbreak investigation
- Health promotion
- Sanitary supervision

The infectious disease (ID) surveillance system, developed by HPA, relies on symptom reports of hospital staff when absent from duty due to an illness suspected to be of ID aetiology. A protocol for hospital surveillance outlines the recommended procedures to be taken on suspicion of an ID outbreak, triggered by the analysis of routine data collected on absence and symptom reports.

The tool to detect a possible outbreak is based on the analysis of routinely collected records on HCW absence. Over a period of time, baseline data will be collected against which later deviations from the usual can be measured. In order to identify exceedance in the overall levels of absence, the daily count can be compared with expected levels estimated from historical data within the same institution. An exception analysis of daily absence can indicate unusual events.

The purpose of the toolkit developed by NIPH is to assist European countries in meeting the core capacities required by the IHR 2005 by improving event reporting from the local to the national level.

The toolkit emphasizes the importance of clinicians and laboratory staff in the reporting of public health events and promotes event reporting in addition to notifiable disease reporting. The toolkit components are designed as practical templates to be adapted by the national public health authority using country-specific information before distribution to the relevant sub-national public health authority. The toolkit includes templates for:

- Awareness campaign tools
- Education and training materials
- An implementation plan

Travelling by public transport is often associated with close contact to persons in confined spaces. The risk of disease transmission is thus increased. To date, public health efforts regarding contact tracing on public transport have been focusing solely on air travel. The outcomes of the RKI work provide:

- A risk assessment tool – the pictorial profiles “CT-RAP” – to support evidence based decision making on contact tracing exemplified for the following infectious diseases:
  - Tuberculosis,
  - Measles
  - Meningococcal Disease
- Disease specific fact sheets to support decision making

All tools as well as more detailed information can be found on the websites of the European Agency for Health and Consumers [ec.europa.eu/eahc/index.html](http://ec.europa.eu/eahc/index.html) and under [www.rki.de/react](http://www.rki.de/react).