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eSurveillance: “Preparing a European Response to Health Risks”

James Kass
European Space Agency

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Elements of Surveillance

- Health reporting of infectious or other diseases
- Epidemiological analysis: including data on environment, socio-economic,..
- Statistics and modelling of impacts
- Management of natural and man-made disasters





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Surveillance functions

- Prevention
- Alert for populations/citizens
- Alert for decision makers
- Public health planning





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Critical aspects

- Speed, speed and speed
- Reliability of the information
- Completeness of information: global understanding (environment...)





Needs

- Political commitment
- Unified approach for
 - Identifying
 - Classifying
 - Reporting
 - Modelling
 - Training





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Challenges: Policy

Several activities already exist either at national or at European level, i.e. ECDC, however there is still an obvious deficit in Policy Framework leading to:

- lack of preparedness
- lack of standardised reporting and communication
- Lack of data integration capability
- Lack of information to the public, media, decision makers and professionals
- Lack of decision-making capability based on common information
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Challenges: Social-Organisational

- Need for a European EWS (early warning system) connected to a global EWS
- Need to inform, sensitize and educate the citizens (avoiding “epidemic of fear”)
- Need to streamline the numerous actors involved
- Need for preparedness to anticipate and act





Challenges: Technical

- Main aspects:
 - Data collection and analysis
 - Data fusion: epidemiology, meteorology, geography,...
 - Dissemination of processed information
 - Regional/national
 - European/regional in the sense of WHO
 - International (UN/WHO)
- Need to increase awareness of these tools
- Need to have these tools also available in developing countries
- Need to increase access to data, standardisation, models, multidisciplinary approach, validation by simulations





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Inter-operability is a major need

- To improve health-mapping (meta-databases)
- To increase the speed of information exchange
- To improve European and global modelling (at world scale) and therefore predictability
- To train specialists





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Highlights of eSurveillance

- **NEW SERVICES**
- **INTEROPERABILITY OF EXISTING SYSTEMS**
- **SIMULATIONS** leading to:
 - a better information of the public at large
 - a better training of professionals
 - a better awareness of decision-makers
 - a better education of the media (i.e. to avoid panic)

