

ISDS Research Committee: Member Survey Results

The ISDS Research Committee promotes research in advanced disease surveillance through multiple activities, such as topical webinars and bi-monthly Literature Reviews. We conducted a survey of ISDS Members and other stakeholders to assess interests and preferences for the activities of the Research committee. The overall goal is to help ISDS to better serve our membership and community. We received 126 responses.

Responses to: Research topics of interest that you would like ISDS to host presentations on:

Environmental Issues

- Natural disasters
- Use of electronic data sources for response
- Pollution: radiation, oil spills, etc.
- Pesticide use
- Chemical toxicity
- Relationship of disease and the environment
- Zoonotic surveillance & One Health approach
- Water and sanitation

Surveillance Systems

- Integrated surveillance systems
- Workflow optimization
- Cost-effectiveness of surveillance systems
- Performance evaluation
- User experience: recommendations for system enhancements

Surveillance in Practice

- Practical applications of research for public health practice
- Practical applications of syndromic surveillance and health forecasting: specific, real-world examples of use and follow-up
- Response management tools and decision support
- Situational awareness

Do you have a topic you can present on? Contact us at: info@syndromic.org

Infectious Disease Surveillance

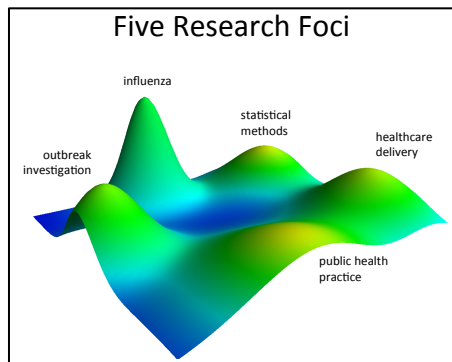
- Communicable diseases
- Emerging infections/pathogens
- Endemic diseases
- Influenza
- Drug resistance, i.e. MRSA
- Immunizations
- Neglected diseases

Policy

- Electronic Health Records and Meaningful Use
- Health Information Exchange
- International Health Regulations

International surveillance:

- Data exchange and integration
- Cross-border surveillance
- Surveillance in resource-limited settings
- Global surveillance systems
- International health regulations
- International spread and tracking of disease
- Travel surveillance



Methods and Tools for Surveillance

- Novel applications and data sources
- Statistics
 - Bayesian analysis
 - Statistical and machine learning methods
 - Detection algorithms
 - Disease modeling and decision support
 - Chief complaint sensitivities and specificities
- Data Sources:
 - Data standardization
 - Data collection and distribution
 - Novel data sources
 - Poison control data
 - Analysis of integrated data sources
 - Integration of reportable disease data
 - Real-time data (Twitter, RSS media reports, etc.)
 - Social media
 - EHR data
 - Sentinel surveillance – how to generalize results
 - School absenteeism
- Visualizations:
 - Disease mapping
 - Novel mapping techniques
 - Health disparities
 - Spatial disease clusters
 - Geographic spread of chronic diseases