WHAT WE DO

• **Integrate and analyze** data and information from various sources to provide shared situational awareness of potential acts of bioterrorism and/or disease outbreaks.

• **Monitor and report** on the status of high priority health and disease events.

• **Share and support** biosurveillance activities with Federal, State, local, tribal, and territorial offices.

• **Improve and advance** biosurveillance by seeking innovative data sources and methods using enhanced tools and technologies.
NBIC PRODUCTS

• Produce daily, periodic, tailored, and classified intelligence reports

• Analyze 8700+ open source (publicly available) articles daily from disparate sources as well as commercial, DHS component, and academic and scientific publications

• Distributed and accessible to thousands of diverse federal, local, intelligence, international, and private sector partners

• Respond to Requests for Information (RFIs)

“This international edition of the NBIC Biosurveillance Event Report is an example where the information does impact the decision making of the US Department of Transportation. We have informed our Regional national Response Team representatives and Emergency Transportation coordinators to monitor the situation.”

- U.S. Department of Transportation
NBIC is Implementing Innovative Technology

Our Technology Efforts and Solutions

1. Maximizes use of available open source data
2. Provides robust analytics and visualizations for enhanced insights
3. Collaboratively develops tools with interagency partners for shared benefit across biosurveillance stakeholders

Current Federal Partners for Technology Development

- BSVE is designed to serve as an analytic workbench for in-depth evaluation of biological events and threats.
- Analysts from NBIC and Interagency partners can use the platform for real-time information exchange.
- BSVE provides dozens of applications aimed at reaching new insights as biological events evolve.

- NBIC Biofeeds serves as a one-stop tool for open source collection and analysis.
- NBIC analysts and partners use the technology daily to readily detect emerging biological threats of concern.
- NBIC Biofeeds captures 50,000+ sources from across the globe in dozens of languages.
Current State

- Provides alerts in weeks to months
- Limited or no access to relevant data and information
- Public data oriented
- Produces reactive reports

Future Needs

- Integrated systems that provide access to wide range of data and information
- Alerts provided in hours to days
- Inclusive of Private Sector
- Provides predictive analytics
VITAL AND HEALTH STATISTICS IMPORTANT TO NBIC

- Demographic data from census
- Death Certificates
- Health Surveys
- Hospital Episode Data
- Infectious Disease Notifications
- Congenital Malformation Registration
- Mortality and Morbidity Data
- Birth Registrations

Analysis of trends
Signals of anomalies
Location/Translocation
Severity
Impacts to Health
Since May 2015, when Zika virus detection was first reported in Brazil, Zika activity steadily spread to additional countries throughout the region including the U.S. territories of Puerto Rico, the U.S. Virgin Islands, and American Samoa. Additionally, Florida reported active mosquito-borne transmission in two distinct confined areas of Miami-Dade County.

Vital Health Statistics help to inform:

- The actual presence of a threat to health or an outbreak
- Location/Translocation Risks
- At-risk populations (pregnant women)
- The type of response necessary for addressing the threat to the public.
In 2014, a nationwide outbreak of enterovirus D-68 (EV-D68), a severe respiratory illness primarily among children, caused national concern and was a highly visible event.
AVIAN INFLUENZA

A variety of Influenza A viruses circulate among birds and some may emerge to cause disease in people. These AI viruses may undergo changes over time allowing the virus to efficiently spread among people and cause a pandemic.

Vital Health Statistics help to inform:

- Mortality rates for distinguishing between routine seasonal influenza and wider pandemic outbreaks
- At-risk populations (Elderly, Infants, Children or Middle-aged Adults)
- The type of response necessary for addressing the threat to the public.

National Biosurveillance Integration Center
Office of Health Affairs
Suspected Opioid Overdose Cases

May-17 Aug-17

Age and Gender Distribution - All Events

Milligrams Naloxone Administered

May-17 Jul-17 Sep-17

Suspected Overdoses by Day of Week

OPIOID EPIDEMIC
CONCLUSION

• Vital and Health Statistics help to inform many different aspects of biosurveillance.

• Response to real-world health events can be assisted with timely, accurate vital and health statistics.

• Transformation from the current model of reporting to projection requires integration of data and information.
CONTACT US

Request NBIC Reports | Join Expert Briefings | Submit RFIs

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