

National Biosurveillance Integration Center (NBIC)

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U.S. Department of Homeland Security

National Committee For Vital and Health Statistics
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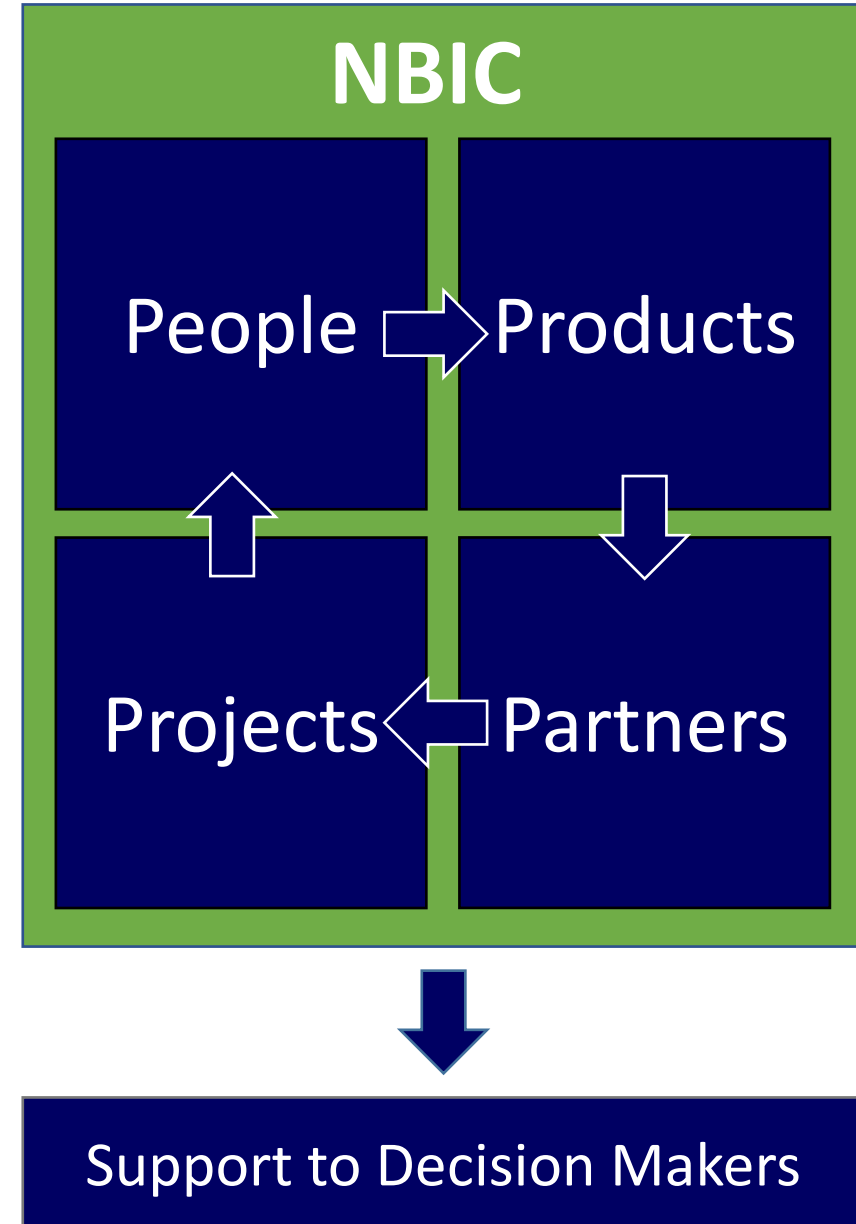
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WHAT WE DO

- **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.



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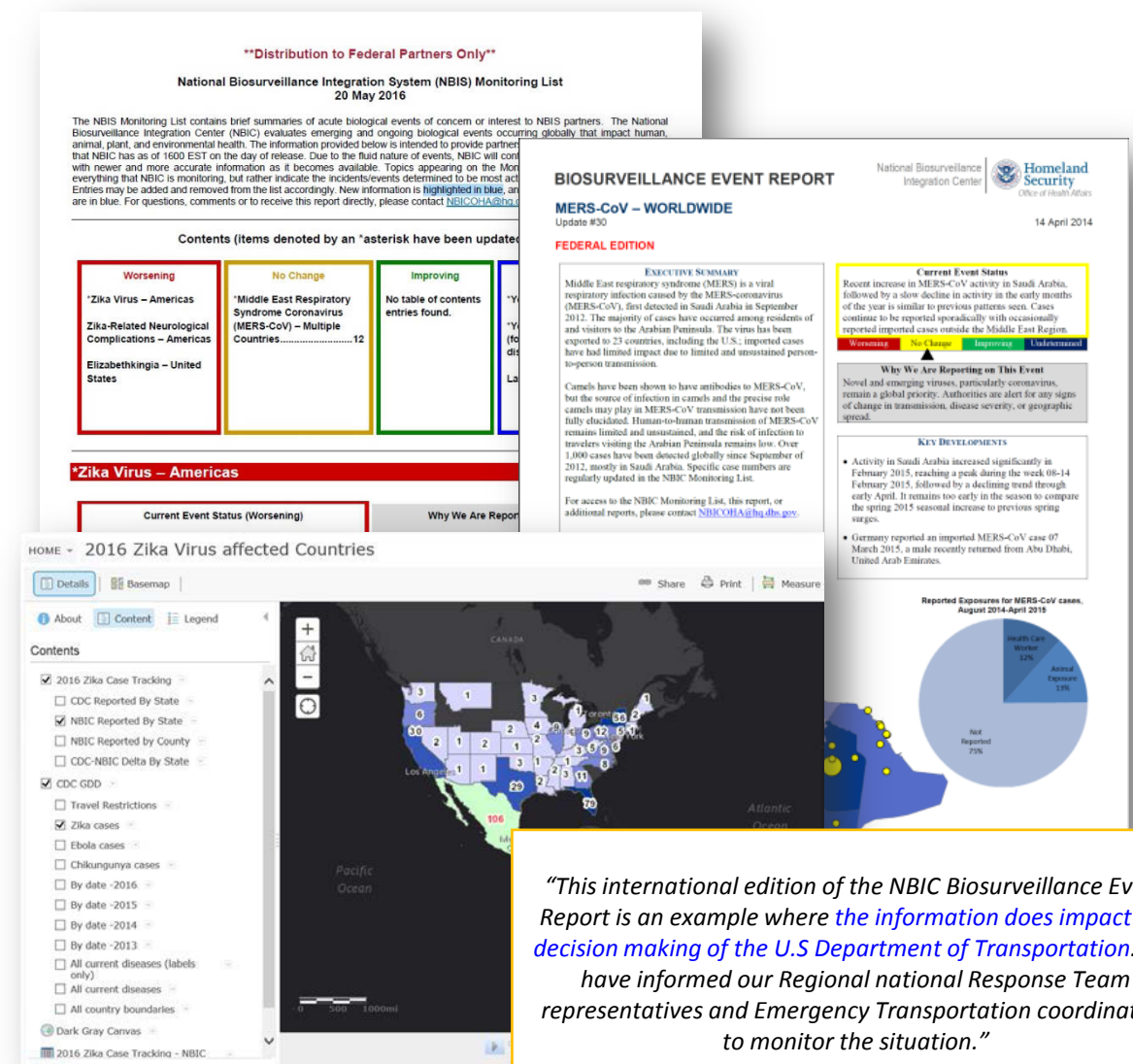


NBIC PRODUCTS

- 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)



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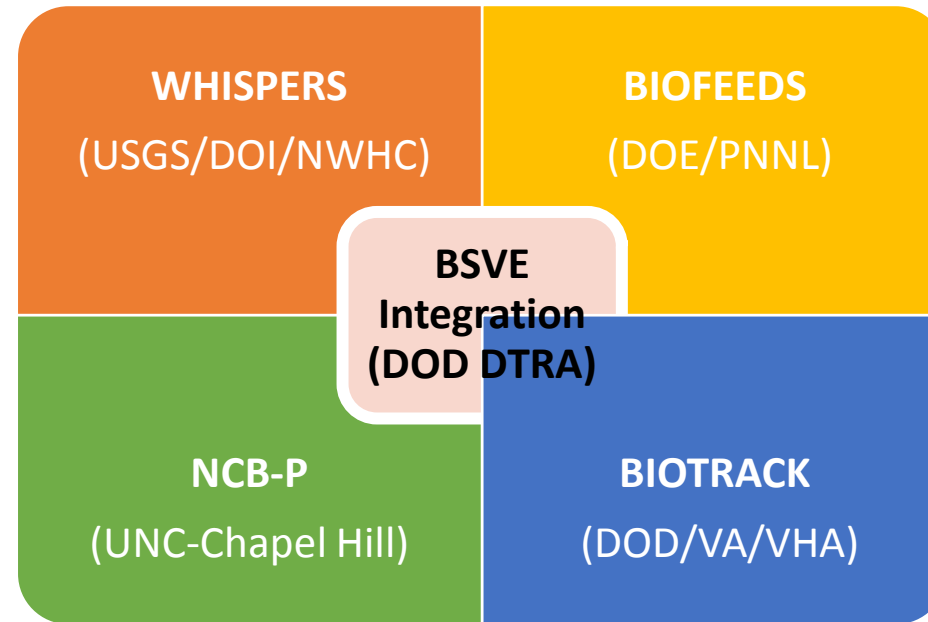
NBIC is Implementing Innovative Technology

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



- 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.

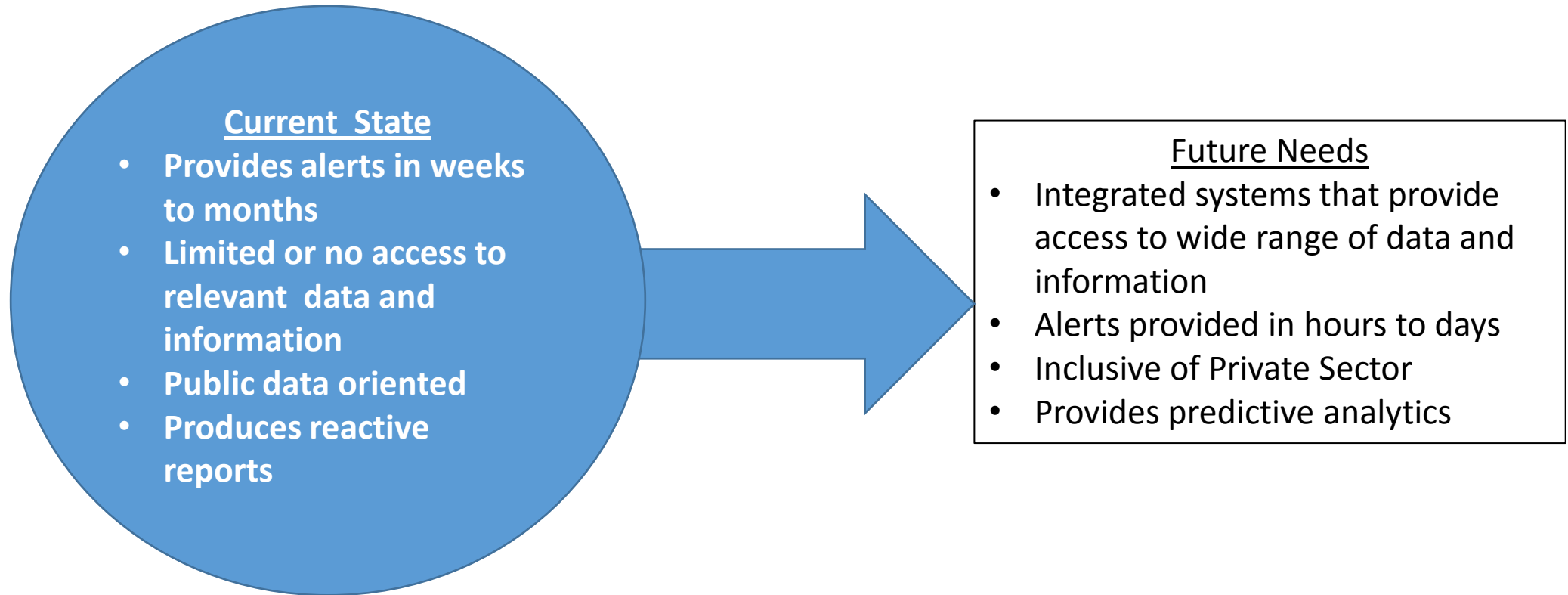


Current Federal Partners for Technology Development

NBIC BIOFEEDS

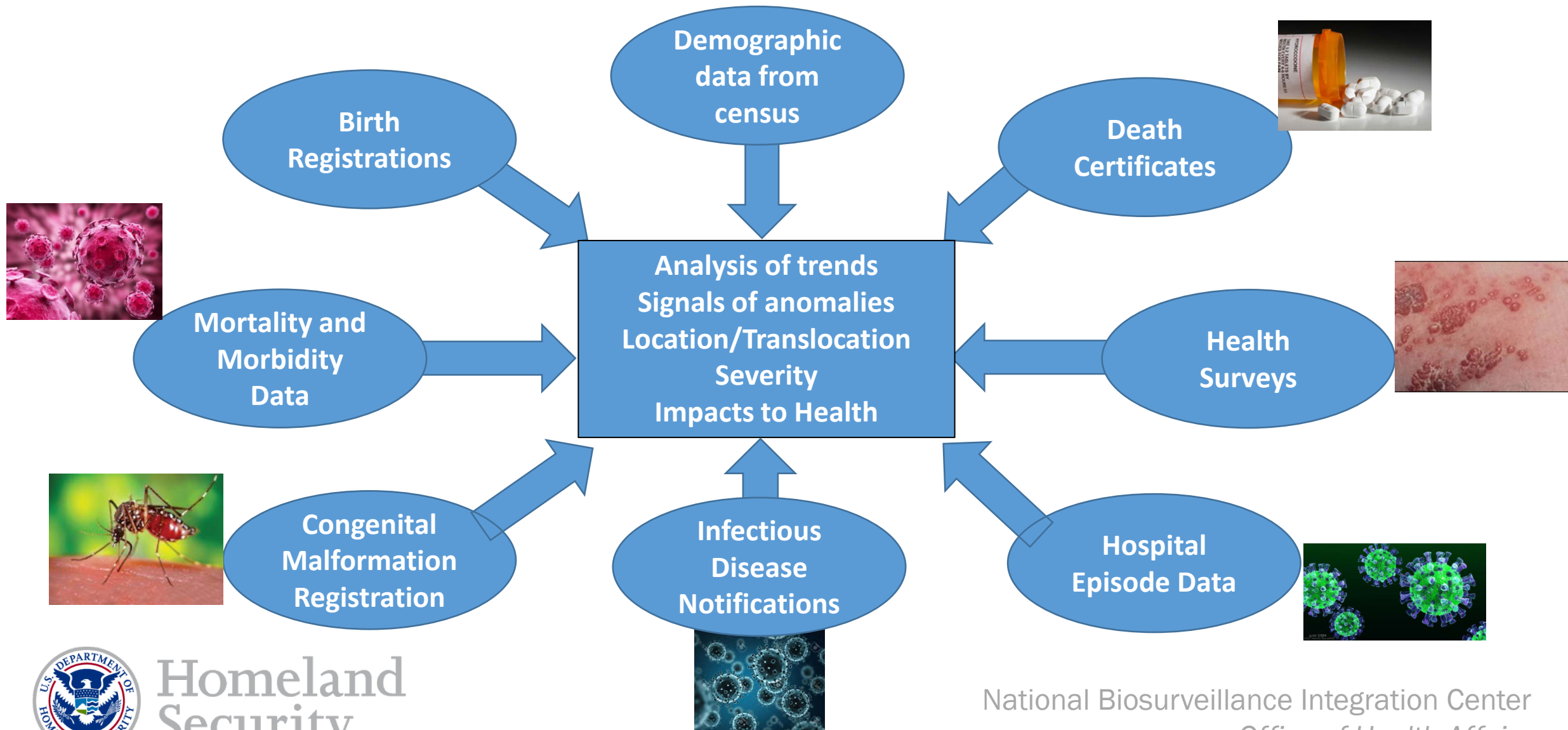
- NBIC Biofeeds serves as a **one-stop tool** for open source collection and analysis.
- NBIC analysts and partners **use the technology daily** to readily detect emerging biological threats of concern.
- NBIC Biofeeds **captures 50,000+ sources** from across the globe in dozens of languages.

CURRENT STATE AND FUTURE NEEDS



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VITAL AND HEALTH STATISTICS IMPORTANT TO NBIC



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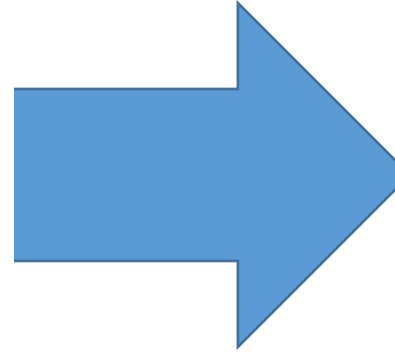
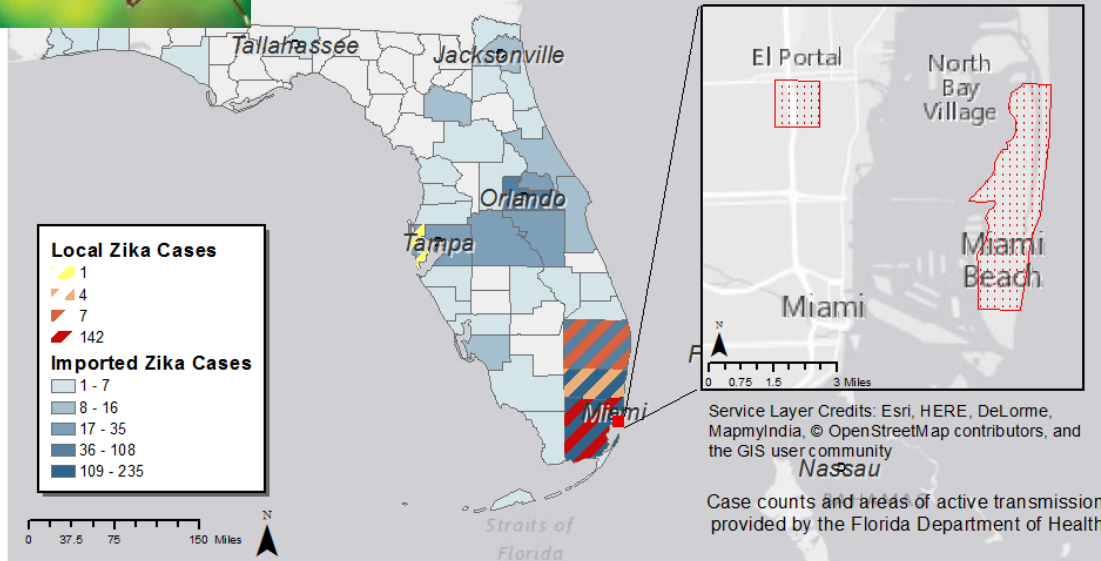
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ZIKA IN THE U.S.



Department of Homeland Security

Areas of Active Transmission



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 the addressing the threat to the public.

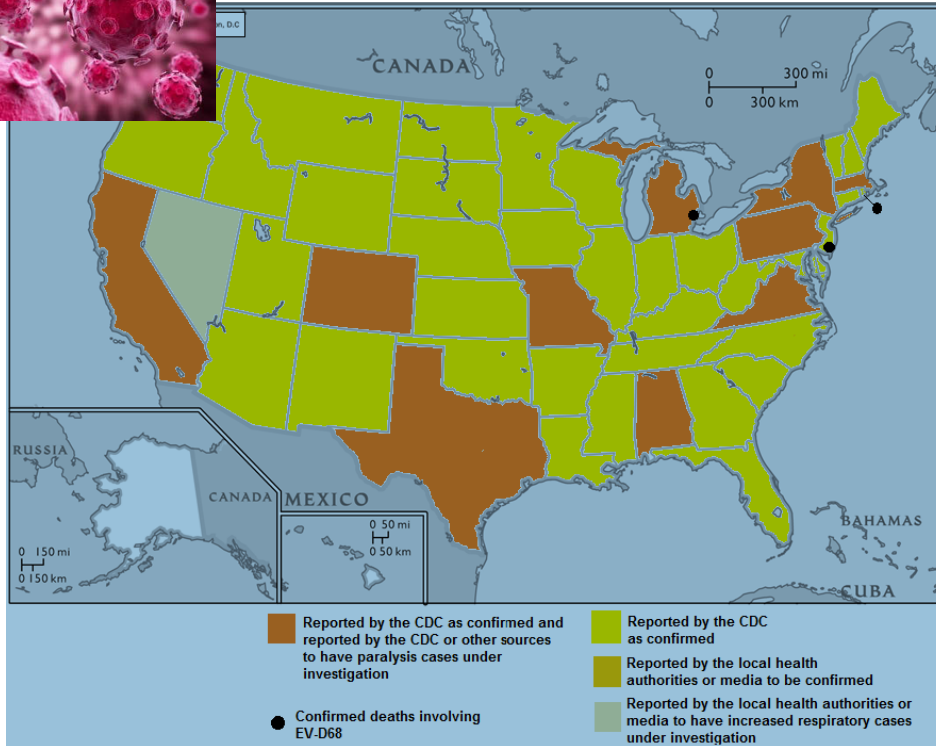
Since May 2015, when Zika virus detection was first reported in Brazil, Zika activity steadily spread to additional countries throughout the region including the U.S. territories of Puerto Rico, the U.S. Virgin Islands, and American Samoa. Additionally, Florida reported active mosquito-borne transmission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



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ENTEROVIRUS (EV D68)



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.

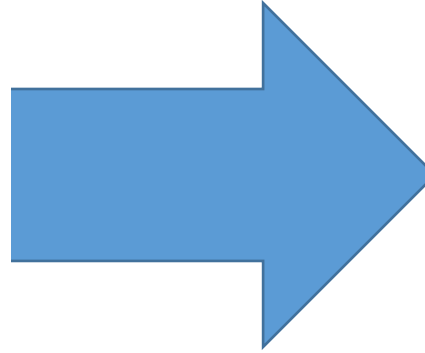
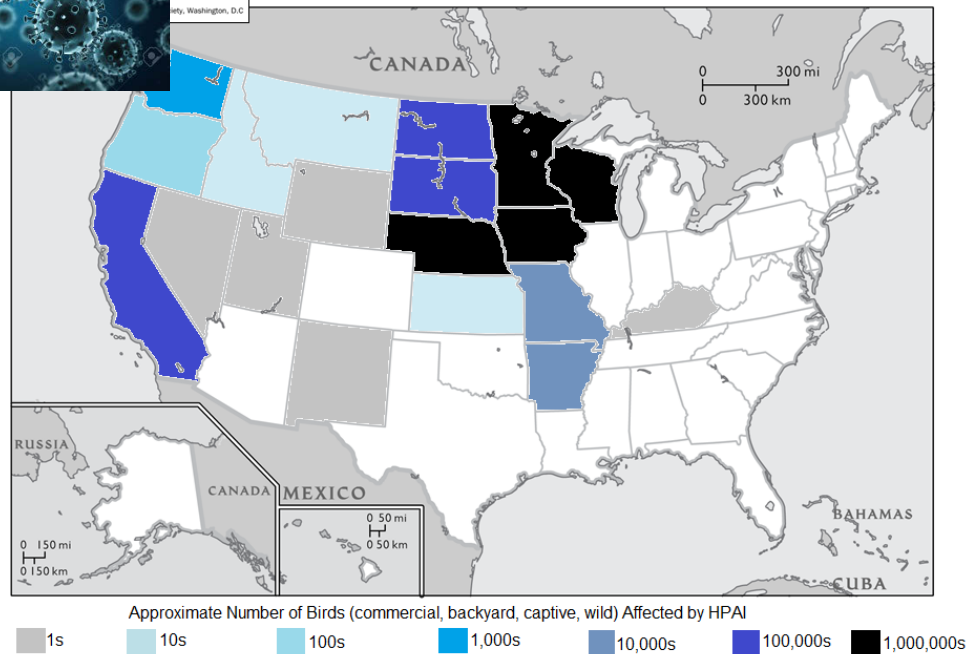
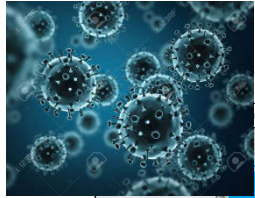
Vital and Health Statistics help to inform:

- Determining if was a routine seasonal health event or a more severe illness
- At-risk population (Children)
- The type of response necessary for addressing the threat to the public.



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AVIAN INFLUENZA



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.

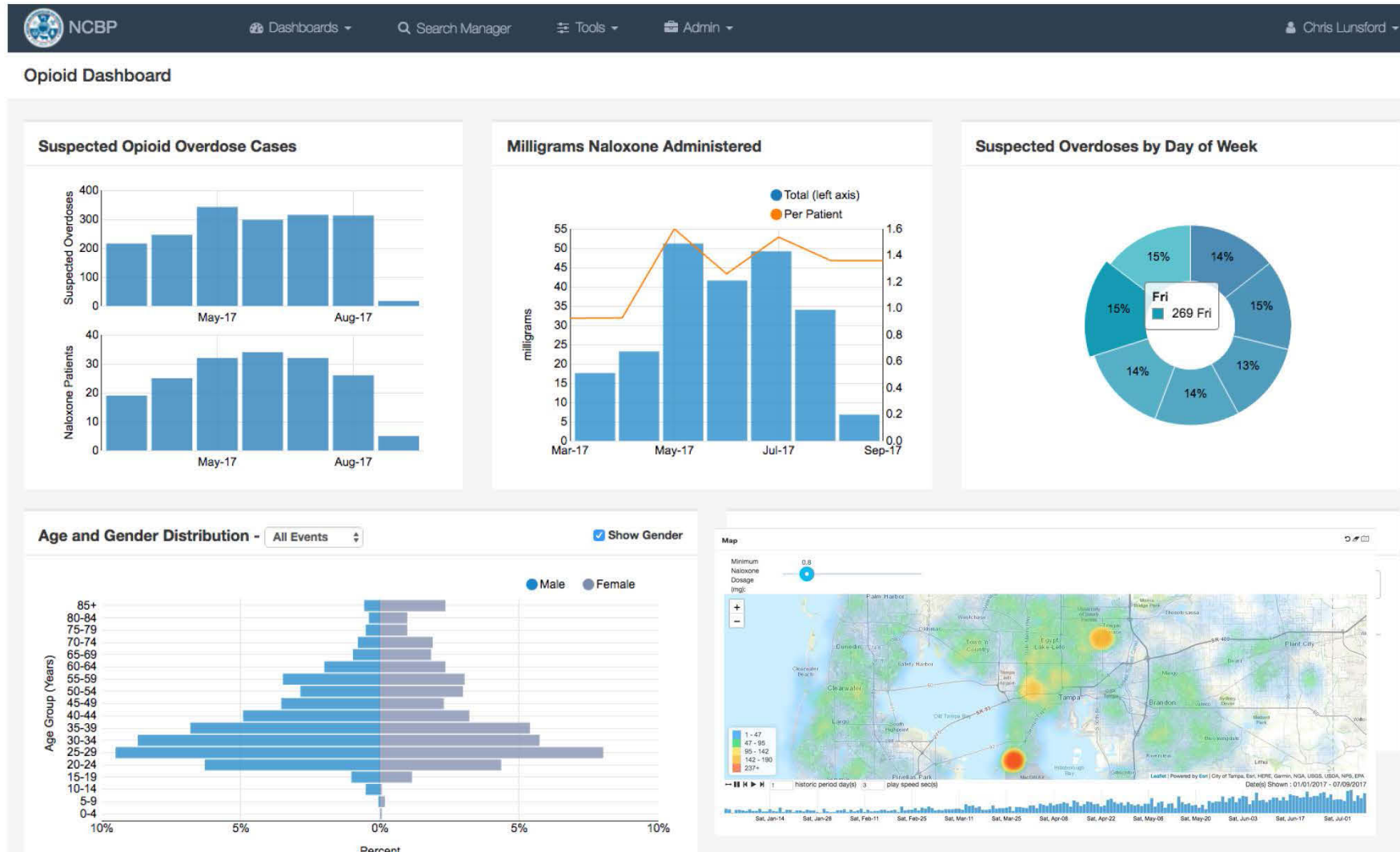
A variety of Influenza A viruses circulate among birds and some may emerge to cause disease in people. These AI viruses may undergo changes over time allowing the virus to efficiently spread among people and cause a pandemic.



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OPIOID EPIDEMIC



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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.



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