

## FACT SHEET

# ESSENCE

## ELECTRONIC SURVEILLANCE SYSTEM FOR THE EARLY NOTIFICATION OF COMMUNITY-BASED EPIDEMICS



The Department of Defense (DoD) Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) collects near **REAL-TIME BIOSURVEILLANCE DATA GLOBALLY** for over 9.5 million Military Health System (MHS) beneficiaries. **ESSENCE RECEIVES SEVERAL TYPES OF DATA, INCLUDING OUTPATIENT HEALTH ENCOUNTER RECORDS, PHARMACY PRESCRIPTIONS, LABORATORY RESULTS, AND RADIOLOGY REPORTS.**

To learn more, review the links below and scan the code with your mobile device.

Articles about ESSENCE:

- ▶ Development of a New Fleet Disease and Injury Surveillance Capability Using ESSENCE
- ▶ Predicting COVID-19 and Respiratory Illness: Results of the 2022–2023 Armed Forces Health Surveillance Division Forecasting Challenge
- ▶ Enhanced Mpox Outbreak Case Detection Among MHS Beneficiaries Through Use of ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics)



HEALTH.MIL



ESSENCE is hosted by the Enterprise Intelligence and Data Solutions (EIDS). EIDS provides a centralized repository for all Military Health System data with a portfolio of innovative people and capabilities which enables interoperability with disparate organizations. To learn about EIDS, visit <https://www.health.mil/Military-Health-Topics/Technology/PEO-DHMS>. For more information on ESSENCE, including product news and training, please visit <https://health.mil/Military-Health-Topics/Health-Readiness/AFHSD/Integrated-Biosurveillance/ESSENCE>.

### KEY CAPABILITIES

- ▶ Provides recent health data for enhanced case finding, trend monitoring, and outbreak detection among MHS beneficiaries
- ▶ Enables users to systematically query millions of health encounters and laboratory data to detect health events of interest (e.g., infectious diseases, injuries, mental illness, and diseases due to environmental exposures)
- ▶ Provides 5-years' worth of historical data allowing comparisons of current and past trends in health events
- ▶ Has built in statistical algorithms to detect unusual increases in health events, alerting public health staff to findings that may warrant investigation
- ▶ Allows users to create custom time series graphs, tables, and line lists (individual record-level data), as well as interactive dashboards to visualize data for health events of interest

### KEY BENEFITS

- ▶ Allows Defense Health Agency epidemiologists and public health officers to investigate and obtain situational awareness of any health event of interest
- ▶ Supports the MHS Force Health Protection mission to maintain readiness by providing situational awareness and supporting informed public health decision-making and interventions against public health threats.