Enterprise Data, Analytics, and Visualization: Connecting People with Data Faster

Enterprise Data Analytics and Visualization (EDAV) is a critical part of CDC's Data Modernization Initiative efforts.

EDAV is a cloud-based set of technology, tools, and resources used to simplify data workflows and save time throughout the data process, from data collection to visualization and action. It allows CDC scientists to work faster and work smarter to achieve our lifesaving mission.

What EDAV does

Connects people with data faster. It does this in a few ways. EDAV:

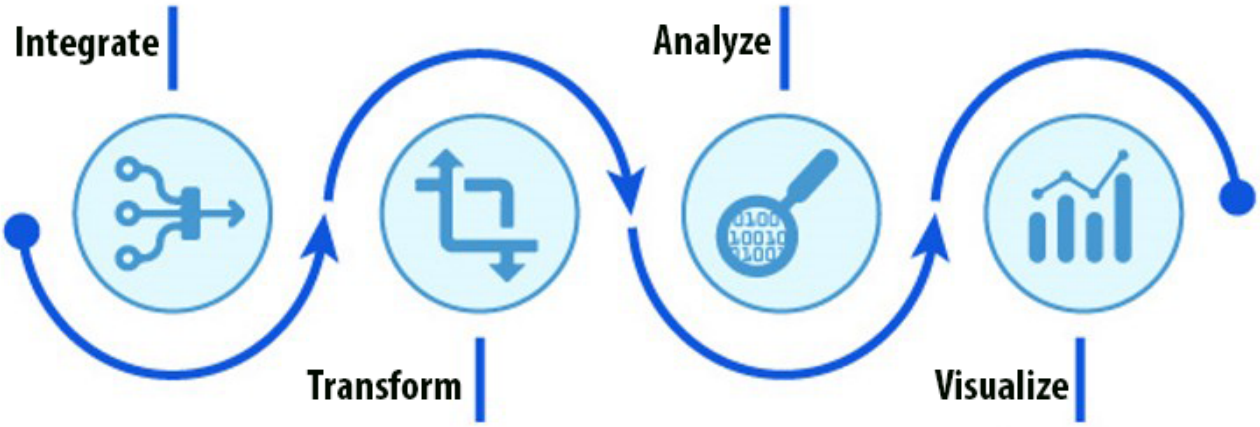
- Hosts tools that support the analytics work of over 3,500 people.
- Stores data on a common platform that is accessible to CDC's data scientists and partners.
- Simplifies complex data analysis steps.
- Automates repeatable tasks, such as dashboard updates, freeing up staff time and resources.

Keeps data secure. Data represent people, and the privacy of people's information is critically important to CDC. EDAV is hosted on CDC's Cloud to ensure data are shared securely and that privacy is protected.

Saves time and money. EDAV services can quickly and easily scale up to meet surges in demand for data science and engineering tools, such as during a disease outbreak. The services can also scale down quickly, saving funds when demand decreases or an outbreak ends.

Trains CDC's staff on new tools. EDAV hosts a Data Academy that offers training designed to help our workforce build their data science skills, including self-paced courses in Power BI, R, Socrata, Tableau, Databricks, Azure Data Factory, and more.

Changes how CDC works. For the first time, EDAV offers CDC's experts a common set of tools that can be used for any disease or condition. It's ready to handle "big data," can bring in entirely new sources of data like social media feeds, and enables CDC's scientists to create interactive dashboards and apply technologies like artificial intelligence for deeper analysis.



EDAV helps CDC's programs efficiently store, transform, analyze, and share data and findings faster than previously possible.

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EDAV in Action

Below are just a few examples of how EDAV is already connecting people with the data they need to make decisions and improve public health.

Connecting data to help refugees and US health partners. EDAV connected US health partners caring for Afghan refugees with information about refugees' health status and vaccination history. This connection helped avoid repeat testing and unnecessary vaccinations, and prioritized follow-up care for people in need. This also provided accessible vaccination information to states for refugees enrolling in schools and jobs.

Reducing reporting times from days to minutes. EDAV allowed CDC to evaluate U.S. Customs and Border Protection travel trends in near real-time through automated data processing. Data that usually took days to compile was ready in minutes to use for analysis and provide updates on the threat of emerging diseases in the United States.

Collaborating with partners to find infectious disease patterns. EDAV built a data process allowing external partners of Tuberculosis Epidemiologic Studies Consortium to work with large datasets on the platform. This helps CDC and external partners better understand how latent tuberculosis (with no symptoms) affects patients, as well as how to improve patient care.

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Source: Centers for Disease Control and Prevention, Office of Public Health Data, Surveillance, and Technology