

Mantle is an open-source web platform designed for the storage, visualization, and sharing of One Health biosurveillance data and is designed to meet the needs of a wide variety of users.

One Health scientists in the field or the lab will be able to upload datasets in multiple formats to Mantle's intelligent database, where they will be stored for easy download and analysis. Mantle users will be able to use fine-grained access controls to protect and share their uploaded datasets, and examine datasets in views appropriate to their content (e.g., tables, maps, and charts). Mantle's flexible storage layer will also display spatial datasets from different data sources alongside one another, and save and export combined datasets.



Mantle users will be able to belong to organizations and groups, and individual datasets will be be grouped together into larger projects, all with group-level access permissions. These features enable scientists to collaborate across geographic, institutional, and disciplinary boundaries to accomplish large-scale data collection efforts that would not be otherwise possible. Mantle also includes a number of open-access datasets from partners, governmental organizations, and biosurveillance data streams that are available for users to combine with their own data or content.

Mantle will provide free access to high fidelity infectious disease data, which will enable scientists, health practitioners, and policymakers

to tackle the world's biggest One Health challenges. Mantle will enable proactive response to infectious disease outbreaks as data are continuously uploaded, analyzed, and contextualized. Open access health data will help One Health research advance and Mantle will fill a critical gap in emerging infectious disease research, knowledge, and prevention.

Mantle is a free and open-source project, developed under the Apache License 2.0, with all code hosted on GitHub.









