

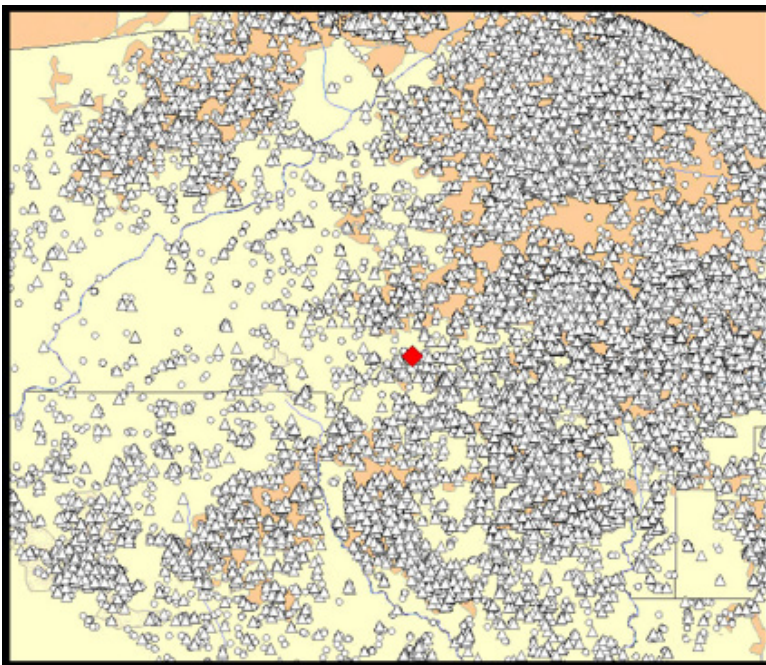
LAHVA (Linked Animal-Human Health Visual Analysis) PRODUCT

What LAHVA Does

LAHVA, which stands for Linked Animal-Human Health Visual Analysis, is a software application that visually shows the correlation between animal and human disease and provides a framework for public health officials to uncover potential threats and respond quickly to health crises. Also, it visually links data collected at human emergency rooms and veterinary hospitals according to geographic region, tracks changes and abnormalities, and provides advanced statistical analysis of those links.

Why it is Useful

LAHVA's additional monitoring of animal symptoms can provide an early alert system, saves time required for manual analysis and enables a quick response time. Also, since many current systems for mining human disease and location data are limited by privacy concerns, LAHVA's ability to extract more precise details in animal cases significantly increases accuracy of event detection and decreases false alarms.



Red point as location of chemical spill, representation of veterinary visits in the surrounding area.

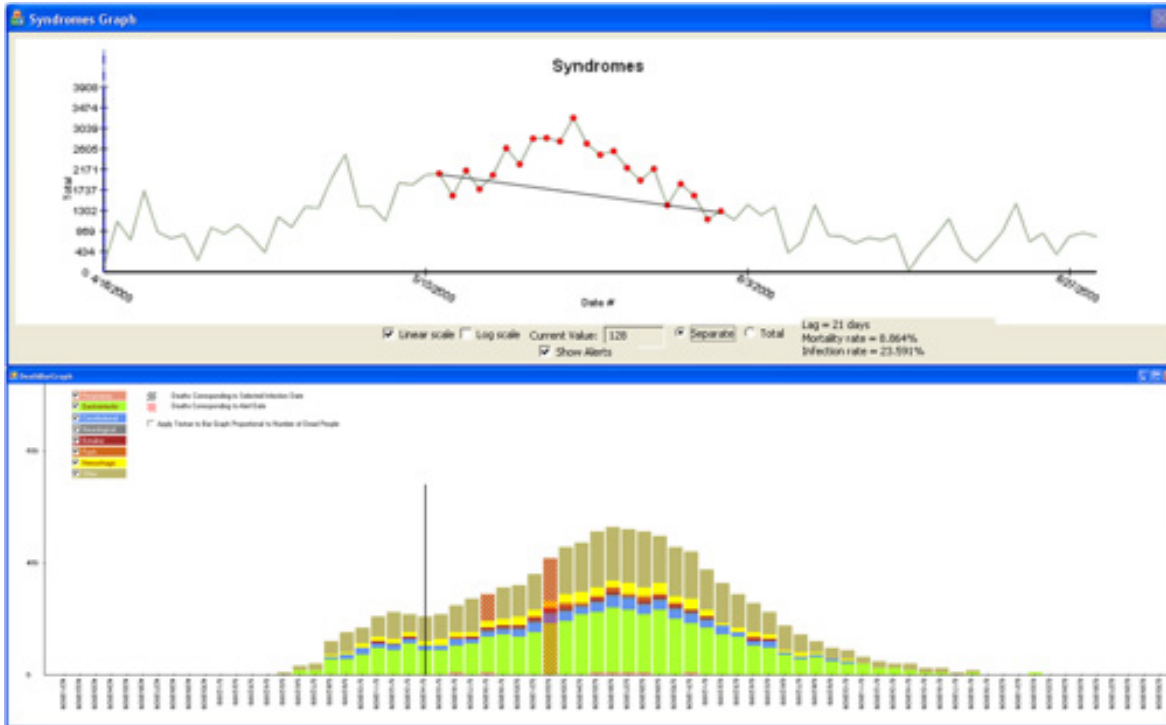
Not Just for Outbreaks

Animal companions often reflect environmental events. Above is LAHVA's representation of veterinary visits in the surrounding area of a chemical spill during the same week.

The LAHVA Technology Difference

LAHVA uses data entered into national databases in real time — by the Banfield Pet Hospital and Indiana Network for Patient Care (INPC) — enabling public health officials to respond quickly to events.

- Components
- Filtering for exploration of potential causes and spread patterns
- Map view for spatial data visualization
- Stacked graph view analyzing links between patient visits and deaths
- Statistical summary window with details on illnesses by age, gender and chief complaint
- Interactive time slider for animation, exploration and analysis
- Tape measure tool for use on the line graph view to measure parameters of pandemic



Tape measure tool and stacked graph view of patient visits and deaths.

Support for Future Detection Award
VAST 2010 Mini Challenge 2

Contact Us

Want to find out how VACCINE's research can help your organization or group? Email vaccine@purdue.edu or visit www.visualanalytics-CCI.org.

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