

*In response to the swine flu outbreak, Shihe Fan, an epidemiologist with Alberta Health Services had this to say about the ARTSSN system - "This situation is exactly the kind of thing ARTSSN was designed to do and the swine flu outbreak is proving just how valuable and useful the ARTSSN system really is."*

## Customer Profile

Alberta Health Services is responsible for all health-related services in Alberta, the 4th most populous Province in Canada. AHS serves a population of 3.5 million constituents and is the largest single employer in Alberta.

## Situation and Challenges

Throughout the province, AHS was seeking better health outcomes for the people in its region. To achieve this goal, they wanted to pro-actively identify health events that would allow them to monitor and react to the spread of disease. Consequently, AHS decided to invest in an integrated disease surveillance system that could aggregate data across multiple health systems, capture additional information through a web interface, and present it in a way that could be quickly understood, evaluated, and acted upon.

## The Problem

- **Siloed Databases:** The existing system of multiple complex and un-connected databases meant that analyzing and visualizing surveillance data across the whole region was something that could not be achieved in real time and required considerable manual effort
- **Reactive Policy:** Without the ability to see across all the systems at once, AHS decision makers did not have all of the tools at their disposal to react to disease outbreaks in real time and pro-actively manage them.

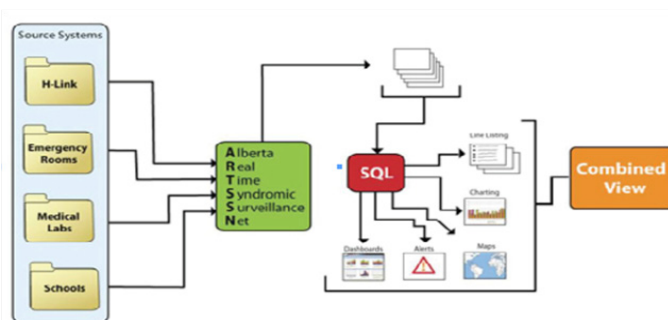
## Our Solution

Alberta Real-Time Syndromic Surveillance Net (ARTSSN) is an online application that leverages Voxiva's health surveillance platform to provide AHS epidemiologists with the capability to access and monitor information from dozens of separate health systems used to deliver health services to the province. By creating a combined database that comprehensively presents all relevant public health data, officials are now able to detect patterns in real time, mine the data and make decisions about health trends which ultimately improves their effectiveness as a public health provider. The system automatically calculates incident rates, displays data on personalized graphs, maps and dashboards and triggers alerts when certain thresholds are met.

In addition to its data mining capabilities, the online application can be used as an interface to capture and investigate communicable disease reports and store that data in the ARTSSN Repository.

## Benefits of the ARTSSN System

- **Powerful Data Management:** The system collects and combines syndromic case reports, lab results and confirmed cases from disparate health systems to create a combined comprehensive data set that reflects the overall health of the region.
- **Intuitive Data Visualization:** User friendly charting, reporting and mapping tools allow users to view and analyze data in one combined real-time view which allows health officials across the region to take pro-active measures against the spread of disease before it becomes a larger problem.
- **Role-Based Access:** The ARTSSN online application allows users role-based access to data that may be sorted or viewed on personalized dashboards.
- **Outbound Alerts:** The ARTSSN online application sends alerts and notifications to relevant role players instantly via email when pre-defined thresholds are met.



For more information, visit: [www.voxiva.com](http://www.voxiva.com)

