

# Michigan Disease Surveillance System Syndromic Surveillance Project

April 2007



# Agenda

- Project Overview
- Why Participate?
- How to Participate
- Screen Shots
- Future Initiatives
- More Info



# Project Overview

- Objective - rapidly detect unusual outbreaks of illness resulting from either naturally occurring or intentional events that pose potential public health threats and emergencies
- Using Real-time Outbreak Detection System (RODS) developed by the University of Pittsburgh
- Participants
  - 65 facilities from across Michigan
  - MDCH - Office of Public Health Preparedness
  - MDCH – Bureau of Epidemiology
  - Michigan Department of Information Technology
  - Altarum Institute



# Project Overview (Continued)

- MDCH and participants exchange data in real-time using Virtual Private Networks (VPNs) to secure the data and HL-7 as the messaging format. This messaging is a type that is used routinely in healthcare.
- Each message consists of:
  - Patient date of birth, sex, Home ZIP code
  - Visit date, time, and class (ER, Urgent Care, etc.)
  - Chief Complaint
  - Data exchange and acknowledgement information



# Project Overview (Continued)

- Currently receiving approximately 8000 emergent care registrations per day (primarily ED, some urgent care).
- Receiving Poison Control Call Center data.
- State and Regional Epidemiologists view the data in near real time.



# Project Overview (Concluded)

## How does it work?

1. Patient registers with basic demographic info and “reason for visit” or “chief complaint”
2. Registration triggers a message with the necessary information which is sent securely to MDCH in Lansing
  - No changes necessary to your registration process
  - The message is not unlike other messages you currently send to your internal and external partners
3. Chief complaint is classified into one of 7 syndromic categories
4. Detection algorithm runs every hour and an email alert is sent to State and Regional epidemiologists if a deviation is detected
5. State and Regional epidemiologists can view charts, maps and registration data online



# Why Participate?

- It's easy – no changes to the registration process
- Help MI provide timely recognition of an emerging infectious disease or Public Health Emergency
- Facilities receive feedback data each month
- JCAHO Accreditation –
  1. Provides evidence of adherence with JCAHO 2005 Infection Control Standard IC.6.10
  2. EC.4.10 The hospital addresses emergency management.
  3. IM Planning IM.1.10 The hospital plans and designs information management processes to meet internal and external information needs.



# Needed To Participate

- Capture the following data elements electronically:
  - Patient birth date, gender, home zipcode
  - Visit date and time
  - Chief complaint
- Ability to send this data across the Internet
  - Preferred method: HL-7 format secured via a Virtual Private Network (VPN)
  - Alternative: Formatted flat file sent via Secure FTP (using the Data Exchange Gateway (DEG) or pulled from your FTP server)



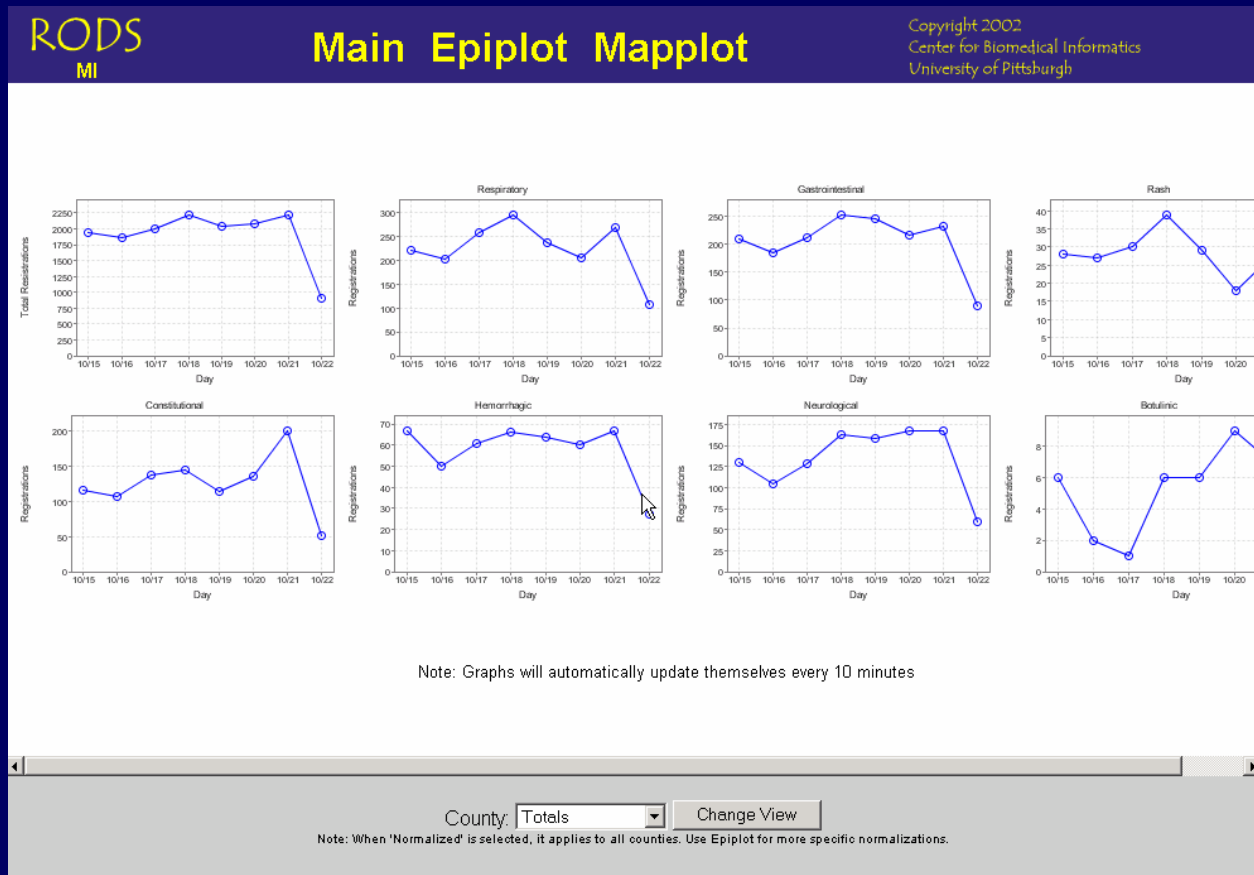


# Needed To Participate (Continued)

- Signed Data Use Agreement
- Contact information needed by facility:
  - Project leader, IT Personnel and Site Feedback Personnel
  - One person could fill multiple roles

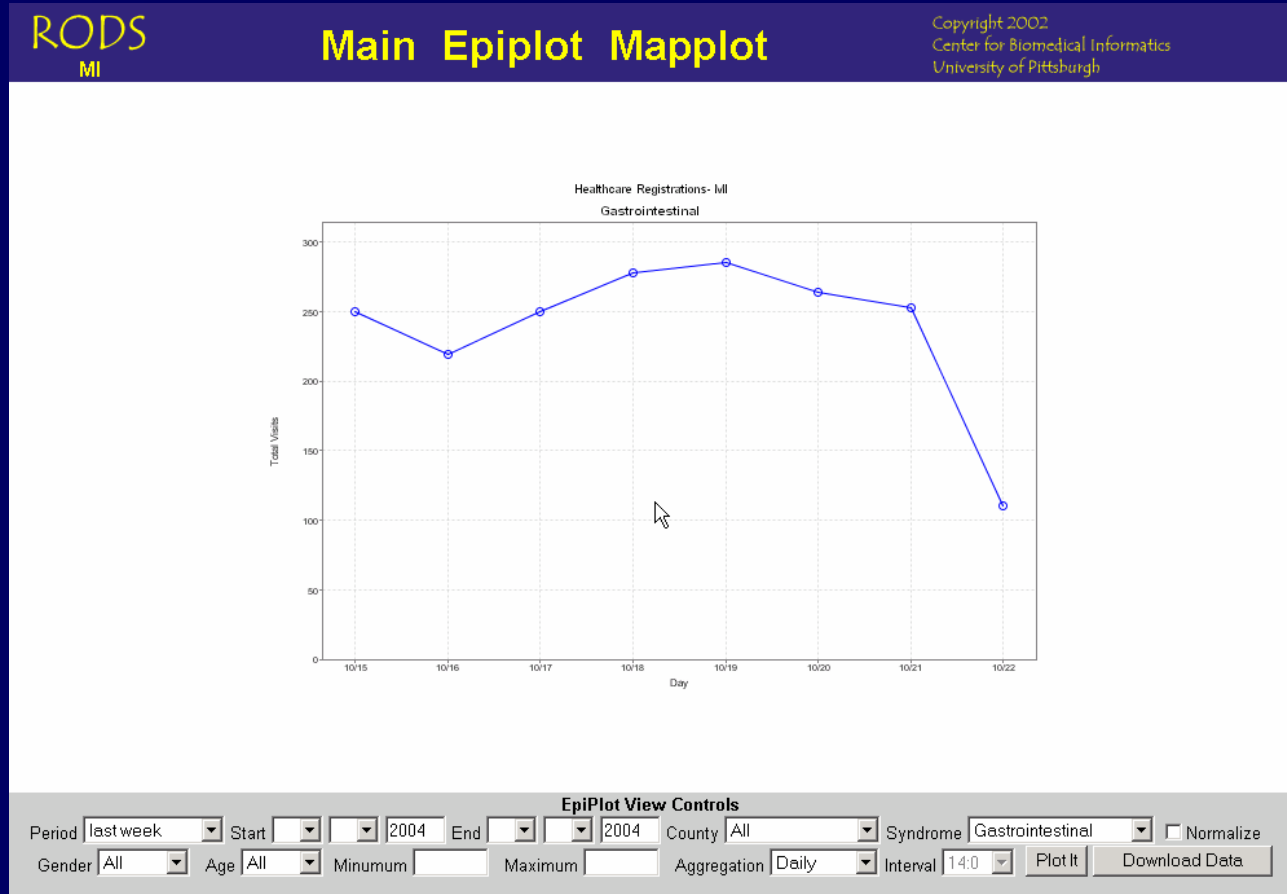
# Screen Shot – Main Screen

## Available to Regional and State Epidemiologists



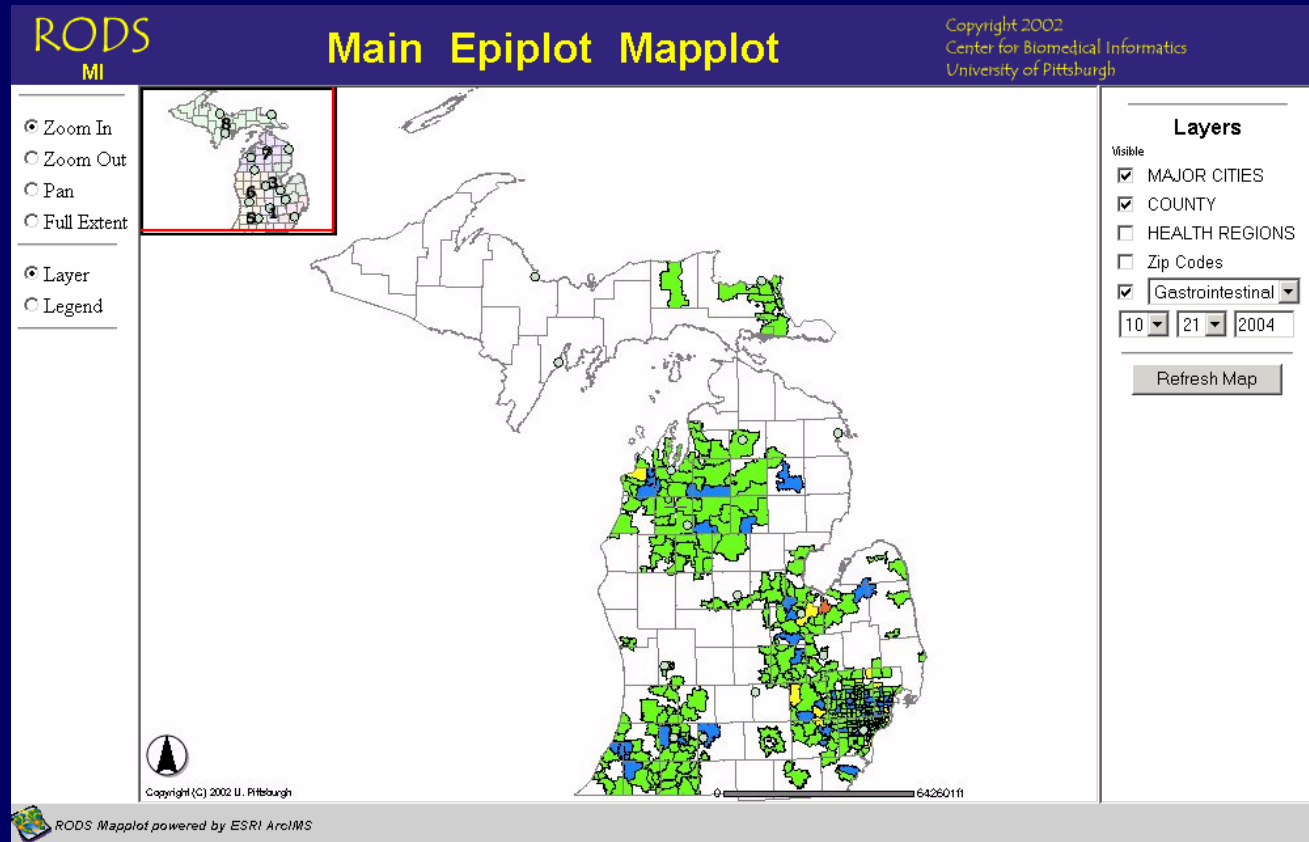
# Screen Shot – EpiPlot Screen

*Available to Regional and State Epidemiologists*



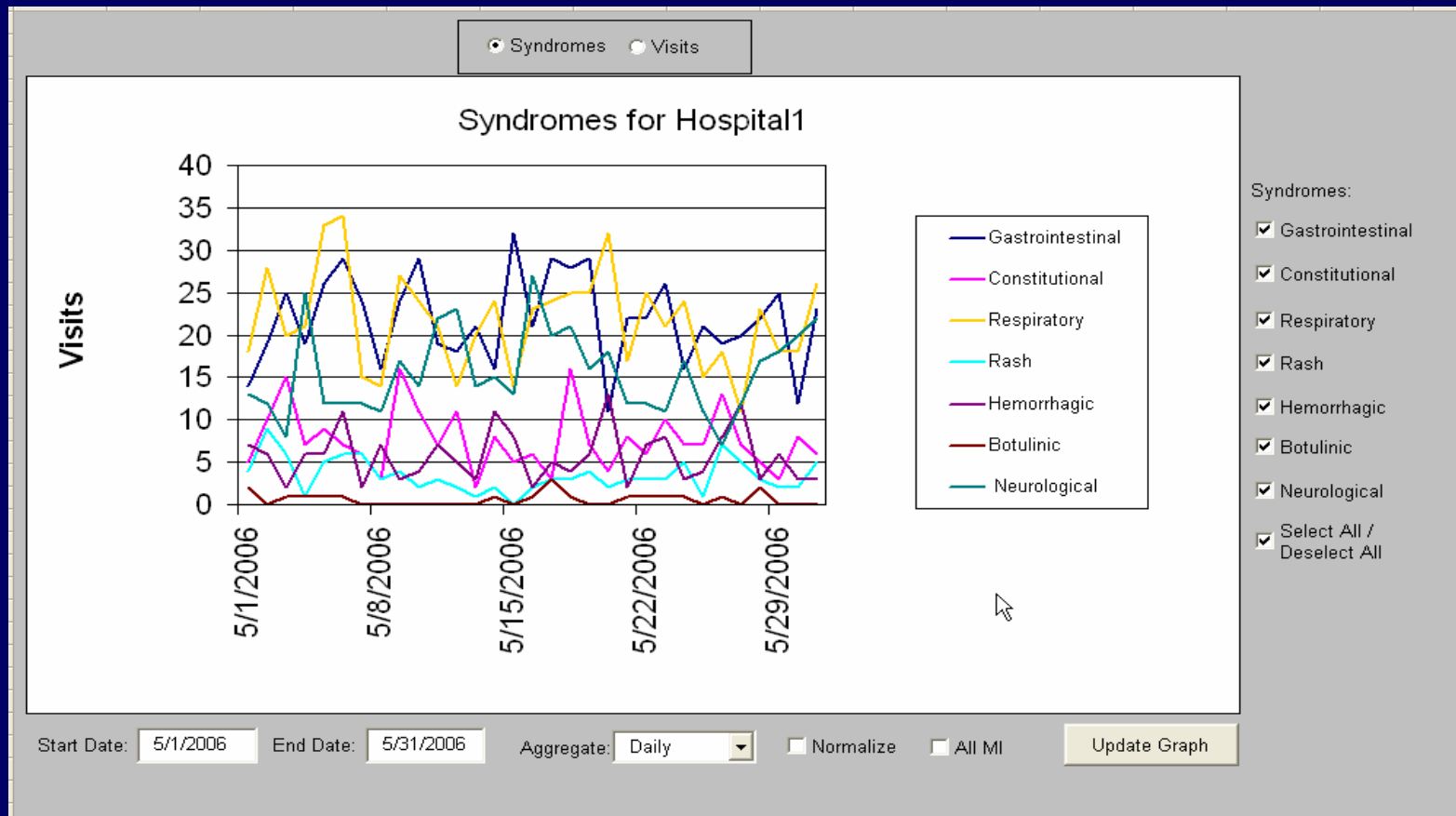
# Screen Shot – MapPlot Screen

*Available to Regional and State Epidemiologists*



# Facility Feedback Screenshot

## Received Monthly by Participating Facilities



# Future Initiatives

- Add more emergent care reporting facilities:
  - hospitals
  - rural and migrant health agencies
- Addition of Nurse Telephone Triage Data
- System Improvements for data analysis :
  - Facility-based charting and mapping
  - Easier alert viewing

# More Information

- For more information, contact:
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# Questions?

