Public Health

Emergency Preparedness and Response

2013 Annual Report

Tri-County Health Department

Serving Adams, Arapahoe and Douglas Counties
Introduction by Director of Emergency Preparedness and Response

We are pleased to present our first annual report regarding the planning, training, exercises and response coordination of the Tri-County Health Department’s (TCHD) Office of Emergency Preparedness and Response (EPR). As background, TCHD Environmental Health Staff have responded 24/7 to environmental issues that have potential public health and environmental impacts since the 1970’s. This historic strong connection to local fire, hazmat and law enforcement partners across our jurisdiction facilitated the development of more fully functional public health preparedness and response plans that were first implemented at TCHD during 2000-2002. Since that time our Office of Emergency Preparedness and Response has refined these plans, developed numerous response agreements with community partners and assembled a scalable and fully functional Public Health Incident Management Team (PHIMT) that assures TCHD response to all incidents from disease outbreaks to natural disasters is effectively managed.

Having an Office dedicated to Emergency Preparedness and Response that is wholly focused on the large scope of preparing for public health all hazard responses across our three counties and 26 municipalities and internally with all of our Divisions, including Nursing, Epidemiology, Planning and Communication (Disease Control), Environmental Health and Nutrition, has greatly enhanced our response to small incidents and large multi-state incidents alike. Additionally, EPR has developed procedures and infrastructure for supporting our response partners during non-public health led incidents like wildfires and the mass casualty incidents. The diverse workforce at TCHD allows for agency support from a broad range of skills and abilities to allow for enhanced response to both public health led incidents and incidents with a public health impact.

The primary benefit of our efforts is a better coordinated response system (state, county and local resources) and more rapid response from Tri-County Health Department and our multidisciplinary partner agencies) to any incident impacting our communities.

It will be important to continue to grow our culture of preparedness as an agency and a community. While the Office of Emergency Preparedness and Response works on EPR efforts on a daily basis, we want to continue to maintain a workforce at TCHD that is always ready to respond in the event of an emergency or incident. It is important for us to foster and grow our network of partners. We want to continue to be a model through the good work we do for our partners statewide and nationally!

We hope you enjoy reading our first annual report!

Michele M. Askenazi, MPH, CHES
Director of Emergency Preparedness and Response
Office of Emergency Preparedness and Response Overview

Mission

To advance coordination and preparedness in order to support appropriate public-health response to incidents and emergencies in the Tri-County Health Department (TCHD) jurisdiction of Adams, Arapahoe, and Douglas Counties.

Program descriptions

Public Health Emergency Preparedness (PHEP) Program

This program promotes local preparedness for natural (e.g., wild fires, floods, disease outbreaks) and man-made (e.g., bioterrorism, radiological) disasters and emergencies through planning, training and exercises with a wide variety of local partners and Tri-County Health Department as whole. These efforts also link to collaborative preparedness efforts between federal, state and local agencies and local health care providers throughout the North Central Region of Colorado. TCHD works to improve its capacity for early identification of disease outbreaks, rapid delivery of prophylaxis, and communication among first responders, health care personnel and public health agencies. This program integrates disease surveillance through the Colorado Electronic Disease Reporting System (CEDRS), 24/7 response capacity, and communication via the Health Alert Network (HAN). Emergency Preparedness assessment includes risk analysis and sharing of expertise and information with both the public and external partners before and during an event. Efforts also include the development of plans (including the public health emergency operations plan, continuity of operations, risk communication and mass prophylaxis) and agreements in preparation for events. Finally, assurance of emergency preparedness is accomplished through training, education, public messaging, exercising, and capacity-building events/activities. Each year, TCHD participates in numerous drills and exercises on topics such as the strategic national stockpile (a federal stockpile of medications and medical supplies), command/coordination/incident management, first responder drills, redundant communication, and other identified areas to improve training and planning.
Cities Readiness Initiative

The Centers for Disease Control and Prevention (CDC) Cities Readiness Initiative (CRI) is a federally funded program designed to enhance preparedness in the nation’s largest cities and metropolitan statistical areas where more than 50% of the U.S. population resides. Through CRI, state and large metropolitan public health departments have developed plans to respond to large-scale bioterrorist events by dispensing antibiotics to the entire population within 48 hours. The Office of Emergency Preparedness and Response has developed plans for receipt, storage and distribution of large quantities of medicine and medical supplies to protect the public in the event of a public health emergency. These resources will be delivered to any state in the U.S. in time for them to be effective.

BioSense 2.0 (Syndromic Surveillance) Program

BioSense is a CDC program that tracks health problems as they evolve and provides public health officials with data, information and tools needed to better prepare for and coordinate responses to safeguard and improve the health of the American people. Mandated in the Public Health Security and Bioterrorism Preparedness and Response Act of 2002, the CDC BioSense program was launched in 2003 to establish an integrated national public health surveillance system for early detection and rapid assessment of potential bioterrorism-related illness. BioSense serves to protect the health of the American people by providing timely insight into the health of communities, regions, and the nation by offering a variety of features to improve data collection, standardization, storage, analysis, and collaboration. The key components of the BioSense program include: 1) building health monitoring infrastructure and workforce capacity where needed at the state, local, tribal, and territorial levels; 2) facilitating the interchange of information that can be used to coordinate responses and monitor health-related outcomes routinely and
during an event; 3) expanding the utility of BioSense data to multi-use [and all-hazard] beyond early event detection and to contribute information for public health situational awareness, routine public health practice and improved health outcomes and public health; 4) improving the ability to detect emergency health-related threats by supporting the enhancement of systems to signal alerts for potential problems; 5) increasing local and state jurisdictions participation in BioSense; and 6) advancing science and technology.
Achievements

**CDC Local Technical Assistance Review (LTAR) of Emergency Preparedness and Response**

In April of 2013 the Centers for Disease Control and Prevention (CDC), Office of Public Health Preparedness and Response, Division of Strategic National Stockpile (SNS) conducted the annual Local Technical Assistance Review (LTAR) for the Tri-County Health Department. The LTAR is an annual assessment for evidence of overall readiness to manage, distribute and dispense SNS materiel during a public health emergency. The 2012 assessment was conducted on June 13, 2012 and the 2013 assessment was conducted on April 10, 2013 which left the Office of Emergency Preparedness and Response (EPR) less than one year to develop plans, procedures and tactics to improve scoring results.

The CDC Health Advisor conducted face-to-face interviews with the Executive Director, EPR staff and the Emergency Managers from all 3 counties in the TCHD jurisdiction. There are 12 planning elements or functional areas with a total of 90 individual components that are evaluated by providing documentation such as policy letters, licenses, written agreements, standard operating procedures, operational plans, training plans, drill and exercise results, meeting minutes, checklists, database reviews, etc. Within 10 months TCHD improved the readiness scores in seven functional areas and the overall score by 10% and achieved a 97%. This was one of the top 2 scores achieved by a local health department for the state of Colorado.

**National Association of County and City Health Officials (NACCHO) Promising Practice Recognition**

EPR received Promising Practice certificates for our 2 submissions to the NACCHO Model Practice process for the following:

1. The TCHD Public Health Incident Management Team (PHIMT) was selected as a 2013 promising practice by the National Association of County and City Health Officials (NACCHO). The purpose of the PHIMT is to promote response capacity, coordination, collaboration, and communication among all divisions in TCHD to ensure that TCHD can effectively respond to any public health incident and remains an effective partner to all other disciplines in the TCHD jurisdiction, specifically in its role of Emergency Support Function (ESF) #8 Lead. The goals of the program are to create depth in the management of and response to complex and long-term emergencies and incidents, and incorporate staff from each division/office within Tri-County Health Department to foster a culture of emergency preparedness throughout the organization.

2. Alternate Care Facilities Functional Annex was selected as a 2013 promising practice and the purpose of the Alternate Care Facility (ACF) Functional Annex to the TCHD Public Health Emergency Operations Plan (PHEOP) is to 1) help emergency managers, pre-hospital agencies, hospitals and Tri-County Health Department establish an agreed upon plan for immediately identifying surge capacity within the hospital system, and for identifying when such capacity may be rapidly over-extended, 2) establish Alternate Care Facilities as needed to help with managing such surge capacity when the scope of any disaster with a scope too large or long-term for the existing infrastructure to handle, and 3) to create and support a seamless system of healthcare surge capacity throughout Adams, Arapahoe, and Douglas Counties that are able to respond effectively and efficiently to public health emergencies of a pandemic nature, from small, but significant incidents to large-scale catastrophic disasters.
Partnerships

- Emergency Preparedness and Response Healthcare Coalition

The Tri-County Health Department EPR Healthcare Coalition exists to support and advance health and medical preparedness, response, and recovery in Adams, Arapahoe, Douglas, and Elbert Counties. This group of hospitals, coroners, behavioral health, first responders, emergency managers, community clinics, volunteer groups, and local public health partners work to align emergency preparedness efforts across municipal and county boundaries.

Because of the efforts undertaken to more closely coordinate preparedness and response planning within the broader health and medical system, coalition members have been able to identify previously overlooked response partners, streamline systems to support response efforts, and coordinate the leveraging of limited resources. Tri-County Health Department has taken the lead in facilitating the process, but the diverse and active coalition membership has validated the process and allowed efforts to progress beyond many expectations.

- Alternate Treatment Center Coalition

In an effort to continually broaden our focus on better preparing our communities to respond to any type of disaster, Tri-County Health Department has established an alternate treatment center coalition to include nursing homes, dialysis centers, and hospice centers alongside traditional healthcare coalition members.

The purpose of this group is to share awareness of existing resources available for disaster planning and response, to train on processes and plans in place to access much needed support through the local health department, and to provide a networking opportunity with our community members as our primary local support system.

- Health and Medical - Emergency Support Function (ESF) #8

The ESFs provide the structure for coordinating Federal interagency support for Federal response to an incident. They are mechanisms for grouping functions most frequently used to provide Federal support to States and Federal-to-Federal support, both for declared disasters and emergencies under the Stafford Act and for non-Stafford Act incidents. There are 15 ESFs identified by the federal government.

TCHD has been identified as the ESF #8 lead in Adams, Arapahoe and Douglas Counties and the City of Aurora within the state of Colorado. This means it is our role to support any response activities or needs associated with the health and medical component of an incident or a planned event. We have worked with our partners to develop an operational annex to the TCHD Public Health Emergency Operations Plan (PHEOP) to best fill this role. The purpose of this annex is to identify the ESF #8 agencies and partners within Adams, Arapahoe, and Douglas Counties and to facilitate TCHD’s role as lead for these jurisdictions and municipalities in creating a
A comprehensive ESF #8 coordination system. This annex describes TCHD’s capacity or method for response to the ESF #8 component of any event or incident as requested by the affected jurisdiction(s). The key to this Operational Annex is that there is a single document providing operational procedures and how they interface with very different emergency management and incident management settings – and it works.

• Medical Reserve Corps

The Rocky Mountain Medical Reserve Corps of Colorado (RMMRCCO), established in 2013 and sponsored by the Tri-County Health Department (TCHD), focuses on providing a strong and willing volunteer force capable of supplementing the public health and emergency preparedness needs of Adams, Arapahoe, and Douglas Counties. While these three counties are the RMMRCCO’s primary focus, the services of the RMMRCCO can be requested by any jurisdiction requiring support. A Medical Reserve Corps (MRC) coordinates the skills of both medical and non-medical volunteers who are willing to volunteer during the phases of preparation, response, recovery and mitigation – which include emergencies or disasters, exercises, health fairs, public health education, and more! In 2013 the MRC gained 15 members, and held 4 MRC Orientations and 2 Member Meetings. For information on volunteering please visit: www.rockymountainmrc.com.

• North Central Region (NCR) Regional Coordination leadership activities

The North Central All-Hazards Emergency Management Region (NCR) is one of nine emergency preparedness and response Regions within the State of Colorado. Prior to September 11th, Colorado's primary response capability was at the city and county level. In August 2002, Governor Owens announced the establishment of seven regions to support this response capability. These seven regions were later expanded to nine as part of the continuing effort to coordinate our response and foster the development of professional relationships. Governor Owens' Executive Order in July of 2003 designated each region as an All-Hazards Emergency Management Region.

The NCR is comprised of a wide variety and diverse type of jurisdictions including mountainous, urban and rural communities. Effective integration of functional areas is accomplished through a collaborative, multi-functional approach to planning and analysis. The wide range of functional areas represented within the region include:

- Emergency Management
- Law Enforcement
- Fire Services
- Special Districts
- Public Health
- Emergency Medical Services
As part of this Region-wide effort to coordinate all-hazards planning and response activities, TCHD EPR staff has assumed leadership roles in a number of regional committees in addition to the numerous committees that are attended on a regular basis. The committees in which we serve as leadership include:

- **NCR Board of Directors** (Board member on behalf of Adams County)
- **Public Health Committee** (chair)
- **Access and Functional Needs (AFN) Committee** (co-chair)
- **Citizen Preparedness** (co-chair)
- **MMRS Steering Committee**
Staff in EPR provided resources and support for the following responses in 2013:

- June Measles Outbreak
- June Hepatitis A Outbreak
- June Black Forest Fire (Douglas County ESF #8 Activation and Public Health Mutual Aid Support)
- June Lime Gulch Fire (Douglas County ESF #8 Activation)
- July Brighton Boil Water Advisory
- August Synthetic Marijuana Outbreak
- September Flooding
- November Shigella Outbreak in a daycare facility
- December Arapahoe High School Shooting

Below are some key summaries to describe the type of response related efforts EPR conducts during non-routine incidents:

**Synthetic Marijuana Outbreak Update**

On Friday, August 30, 2013, Denver Public Health was contacted by the Rocky Mountain Poison Control Center to make them aware of a significant increase in the number of patients reporting to the Emergency Department (ED) exhibiting agitated delirium likely due to exposure to synthetic marijuana. A conference call was held between the local health departments in the Denver Metro Area and CDPHE to gain situational awareness and define a course of action in this new and unique situation. As this was an ongoing incident crossing jurisdictional boundaries, CDPHE served as the lead in the response and study efforts. CDPHE requested support from the CDC to conduct a study on this outbreak with the ultimate goal being the identification of the product(s) and the source so it could be pulled from the market. They worked closely with law enforcement partners to ensure appropriate information was shared to further both investigations. TCHD worked alongside CDPHE and other local health departments to manage the flow of public messaging, the distribution of two HANs containing important reporting information for hospitals and coroners offices, and in gathering field updates from TCHD ESF #8 partners (coroners, hospitals and behavioral health). TCHD also worked to ensure that partners within our jurisdiction serving populations at increased risk for exposure to this substance received information and updates on the outbreak. This was an ongoing incident with new patients reported on a weekly basis.

Preliminary results from the investigation indicated that though numerous brands were identified, it was most likely the result of repackaging of synthetic marijuana products. Four establishments were identified as the source of the products and the information was shared with law enforcement. Evidence suggested that this was a new variant of synthetic cannabinoid that may be linked with a similar outbreak in Georgia. CDPHE continued to work with the CDC to conduct a more in-depth analytic study on the data collected.
July 2013 Brighton Boil Water Advisory Summary

During routine testing, coliform bacteria were discovered in the City of Brighton’s public water distribution system. This prompted a boil water advisory for all users of the public water supply. This affected approximately 34,000 residents, the Platte Valley Medical Center, 128 retail food establishments, 31 child care facilities, and 8 pools. There were immediate efforts to coordinate both response and public information messaging between responding agencies including Brighton, Adams County, TCHD, and CDPHE. TCHD took an active role in providing subject matter expertise and guidance to the City, the hospital, affected retail food establishments, child care facilities and swimming pools to ensure the safety of those they serve. Additionally, TCHD Environmental Health Division fielded calls from the public on the After-Hours Response line and the Commerce City office and acted to ensure that timely and accurate information was shared with concerned citizens and business owners.

The problem was ultimately isolated to a small section of the City of Brighton affecting 20 homes. On July 5th, the boil water advisory was lifted and continued testing will occur as is the normal practice for municipal water systems.

Summer Wildfire Response Summary

In June, 2013, TCHD EPR was activated as the Emergency Support Function (ESF) #8 Lead for Douglas County in response to the Black Forest Wildland Fire and the Lime Gulch Wildland Fire. In this role, EPR and EH staff were deployed to the Douglas County Emergency Operations Center (EOC) to assist in the coordination of all health and medical aspects of the fires. This includes releasing air quality information, planning for possible evacuation and re-entry operations, facilitating the flow of information between impacted hospitals, behavioral health, and the EOC, and working with the Arapahoe Douglas Hazmat representative on situational awareness in the potentially impacted areas. TCHD EH also supported El Paso County with public health and water quality issues during re-entry operations and EPR/EH supported animal mass fatality planning following the Black Forest Wildland Forest Fire.

September Multi-Jurisdictional Flooding

The Colorado Front Range area experienced large scale flooding due to continuous rain in early September. Areas that were impacted spanned from El Paso County north to Larimer County and reaching west into the Estes Park area and east into Morgan County. Twenty Counties reported impacts from the incident including the flooding of several downtown areas, the bisecting of several towns and small cities by waterways and large scale evacuations. Many roads and structures were closed due to damage and debris. Damage assessment and repairs continued for
several months after the initial incident.

TCHD was an active participant in response and recovery efforts for the duration of the incident and during the months of ongoing recovery. EPR staff collaborated with emergency managers from throughout the jurisdiction to facilitate public and environmental health technical expertise, support disaster recovery centers by providing Tdap vaccinations, mold and debris resources and information, and WIC support for those displaced or requiring additional support. Mutual aid support was also provided to a close-by county in both staffing the Emergency Operations Center along with inspecting restaurants to help restaurant facilities reopen. TCHD also provided a public health letter in regards to a Declaration of Immediate Public Health Threat to complement documentation required for federal reimbursement related to the flooding response efforts. Finally, EPR staff worked to maintain situational awareness for TCHD leadership to determine impacts to staff and offices throughout the jurisdiction and ensure coordinated incident response and recovery efforts.
A well-trained public health workforce is the basis for a strengthened infrastructure that has the capacity to prevent, protect, respond, and recover from a variety of hazards, whether natural or manmade, which may affect public health.

- TCHD Course: Utilizing Social Media during a Crisis
- TCHD ICS 100/700 for staff and partners
- Staff Personal Preparedness Training
- Public Health Incident Management Team (PHIMT)
- Operation 317 Closed Point of Dispensing (POD)
- Heritage Eagle Bend Closed POD
- Vigilant Guard – Multi State National Guard Exercise
- COWARN Exercise – Statewide agreement between water and waste water management facilities
- RETAC Medical Cache Workshop
- Englewood Active Shooter Exercise
- Federal Coordinating Center and National Disaster Medical System Patient Movement Exercise
- Healthcare Coalition Workshop
- Adams County Emergency Operations Center “All Hands on Deck” Functional Exercise
- University of Colorado School of Medicine Pandemic Influenza Table Top Exercise
- ESF #8 Workshop
- University Hospital NICU (Neonatal intensive care unit) Evacuation Exercise
- University Hospital Evacuation Table Top Exercise
- Operation 317 Vaccination Exercise Series
- City of Aurora Havana Gardens Emergency Preparedness Day
- Oppenheimer Preparedness Expo
- 2013 NACCHO Emergency Preparedness Summit
  - Opening Plenary Presentation on the coordinated ESF #8 response to the Aurora Mass Casualty incident
  - Ignite Session on SNS Planning
- 2013 NACCHO Annual Meeting
  - Panel on partnering with military installations
- Chicago Healthcare Coalition Emergency Preparedness Conference – Coordinated Response to the Aurora Mass Casualty Incident
- MMRS Evacuation Seminar
  - facilitated a session on future planning efforts between healthcare coalitions and home health care agencies
  - Hazard Vulnerability Assessments and best practices in developing safety and preparedness teams in long term care facilities (LTCFs)
  - provided information from local, state and federal perspectives on what ESF #8 can provide to facilities before, during and after a disaster or incident
- Operation Spore
Operation Spore
On March 20, 2013, TCHD conducted a test of the agency’s staff prophylaxis plan. Cross-divisional teams of TCHD staff met at the Administration Building to receive assignments and collect necessary ‘medications’ and supplies before setting up points of dispensing (PODs) in each of the TCHD office locations. All staff practiced filling out necessary forms, were screened, provided with mock medication and received preparedness materials. While this test was being conducted, EPR staff also managed a functional exercise with our county emergency managers through the online incident management tool, WebEOC. This portion of the exercise tested knowledge of agreed upon roles and responsibilities for an incident of this magnitude along with requests for support in receipt and distribution of material from the Strategic National Stockpile.

On March 21, 2013 TCHD took part in a multi-jurisdictional exercise involving the ten counties of Colorado’s North Central Region and with El Paso and Park Counties. TCHD opened two PODs to evaluate both the TCHD Mass Prophylaxis Annex and the accompanying site specific plans for the drive-through POD at the Douglas County Fairgrounds and a walk-up POD at the Arapahoe Community College. TCHD staff worked side-by-side with staff from Denver Public Health, Denver Environmental Health, Elbert County Health and Human Services, Law Enforcement, EMS/Fire, Behavioral Health and volunteers from our own Rocky Mountain Medical Reserve Corps of Colorado to provide mock medication and preparedness information to the public. Additionally, TCHD staff activated the Department Operations Center, utilizing the Public Health Incident Management Team (PHIMT) to perform incident management operations and the Crisis and Emergency Risk Communications (CERC) Team to draft public messaging and monitor social media. The Executive Management Team (EMT) worked through policy issues inherent in a large scale response. The agency as a whole worked through the day to simulate the effort needed to provide emergency medications to our entire service area.

The planning effort and execution of Operation Spore was a process spanning more than a year and included several workshops and trainings leading up to the full scale exercise. This experience would not have been possible without support from TCHD leadership and our numerous public health, emergency management, law enforcement, EMS, behavioral health, facility, and other partners throughout Adams, Arapahoe, and Douglas Counties as well as the entire Denver Metro Area, El Paso, and Park Counties. We validated many of our strengths and identified areas for improvement that will only serve to make us a stronger asset in our community. Key areas for improvement included streamlining staff check in and check out processes, communications between PODs and the Department Operations Center, and a clear approval approval process for external messaging.
Communications

- Health Alert Network (HAN)
  - There were a total of 34 Health Alert Network messages disseminated throughout the year, the majority of which were Advisories (19). There were 4 Public Health Broadcasts, 7 Alerts, and 4 Updates. A total of 4936 recipients were reached through the Health Alert Network. The HAN messaging is divided into the following categories:
    - Health Alert: Conveys the highest level of importance; warrants immediate action or attention.
    - Health Advisory: Provides important information for a specific incident or situation; may not require immediate action.
    - Health Update: Provides updated information regarding an incident or situation; unlikely to require immediate action.
    - Info Service/Public Health Brief: Provides general information that is not necessarily considered to be of an emergent nature.
    - Other Broadcasts: Used to test the system and get updated info from providers, usually done annually.

- Dialogics
  - TCHD has adopted a State hosted, emergency notification system. TCHD employees receive automated notifications requesting they follow specific prompts to determine if and when they can report to TCHD for incident operations. There were a total of 5 all staff call down tests performed for 2013, two held after hours and two held during business hours. Response rates averaged between 60 and 80%, with higher response rates occurring during the business hour drills. In December of this year, CDPHE, working with local partners, migrated to the Google based system, COSHARE, for statewide information sharing and to support the dialogics system. TCHD EPR Staff played an integral role in making suggestions on how to increase the functionality of the new COSHARE/Dialogics interface.

- Communications Drills
  - TCHD conducts communications and radios drills with Emergency Support Function (ESF) #8 partners throughout Adams, Arapahoe and Douglas Counties at minimum of once a quarter. These drills help to ensure that TCHD is able to communicate with external partners using multiple redundant systems in the event that traditional means are overwhelmed or no longer available. In 2013, TCHD conducted:
- 4 email communication and 4 800MHz radio drill with 18 hospitals, 12 Offices of Emergency Management and 8 other community partners such as behavioral health, school districts and a military installation.
- 8 communication drills with our Local Transfer Point (LTP) custodians

Social media

During the spring of 2013, the Tri-County Health Department piloted the use of an EPR Twitter account. This Twitter account, @TCHDEmergency, serves as an extension to our outreach and community efforts, reaching a broader, more diverse audience for efforts related to emergency preparedness and response. Through Twitter, TCHD can provide information to our communities on preparedness planning, incident response and upcoming local events. This was piloted to promote the EPR exercise Operation Spore. Plans for expanding social media use include daily messaging around pre-identified themes, situation or event specific tweets and re-tweets, and increased messaging during incidents impacting Adams, Arapahoe and Douglas Counties and the surrounding areas.
**Syndromic Surveillance/meaningful Use**

The BioSense program is a public health surveillance system that increases the ability of health officials at local, state, and national levels to efficiently, rapidly and collaboratively monitor and respond to harmful health effects of exposure to disease or hazardous conditions. BioSense 2.0 provides a secure cloud environment to collect and share information on emergency department visits, hospitalizations, and other health-related data from multiple sources, including the Department of Veterans Affairs (VA), the Department of Defense (DoD), and civilian hospitals from around the country. Analysis of these data can provide rapid insight into the health of communities and the country and help guide decision making and actions by public health agencies at all levels.

TCHD was awarded the BioSense 2.0 grant from the Centers for Disease Control and Prevention (CDC) in 2012 through a joint application with Denver Public Health (DPH). Since late 2012, TCHD has worked closely with DPH to establish greater collaboration with hospitals/hospital systems and our local health information exchange (HIE) vendor to meet one of the Meaningful Use Stage 2 criteria – submission of syndromic surveillance data (Figure 1.). In 2013, TCHD began to sign data use agreements with hospitals in the TCHD jurisdiction and developed factsheets and other materials for key partners. In order to be compliant with the Meaningful Use declaration process, information is posted on our website regarding the ability to accept syndromic surveillance data as of October 2013. As BioSense 2.0 moves forward, TCHD will work towards establishing the BioSense data platform for early outbreak detection and routine analysis of syndromic surveillance data.

![Figure 1. Data Submission Process for Syndromic Surveillance](image-url)
Syndromic surveillance is a timely collection, analysis and investigation of health-related data before diagnosis. Through a widespread collection process that begins in hospital emergency departments, it may be possible to track patterns indicative of a disease outbreak/cluster using chief complaint, zip/county code, and diagnosis information.

During 2013 in Adams, Arapahoe, Denver, and Douglas counties, 15 hospitals are working in full compliance with the Healthcare Information Portability and Accountability Act (HIPAA) and working towards the submission of syndrome information (Table1).

Table1. List of participating hospitals in four counties (Adams, Arapahoe, Denver and Douglas counties)

<table>
<thead>
<tr>
<th>Hospitals</th>
<th>County</th>
<th>Hospital System</th>
<th>Hospital</th>
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<tbody>
<tr>
<td>1 *Colorado Children’s Hospital</td>
<td>Adams</td>
<td>Independent</td>
<td>1 Denver Health Medical Center</td>
<td>Denver</td>
<td>Independent</td>
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<td>Adams</td>
<td>HealthOne</td>
<td>2 Denver Veteran’s Administration Hospital</td>
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<td>Independent</td>
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<td>3 Platte Valley Medical Center</td>
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<td>Independent</td>
<td>3 Exempla Saint Joseph Hospital</td>
<td>Denver</td>
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<td>4 St. Anthony North Hospital</td>
<td>Adams</td>
<td>Centura</td>
<td>4 Porter Adventist Hospital</td>
<td>Denver</td>
<td>Centura</td>
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<tr>
<td>5 University of Colorado Hospital</td>
<td>Adams</td>
<td>Independent</td>
<td>5 Presbyterian/St. Luke’s Medical Center</td>
<td>Denver</td>
<td>HealthOne</td>
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<td>6 Littleton Adventist Hospital</td>
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<td>6 Rose Medical Center</td>
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<td>8 **Centennial Medical Plaza</td>
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<td>HealthOne</td>
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* Colorado Children’s Hospital will assess their system and consider joining the project in the future.

** Centennial Medical Plaza is a department of Medical Center of Aurora, and their data will be combined and sent with Medical Center of Aurora.
THANK YOU!

One of the reasons our community has been so successful in building and maintaining the Emergency Preparedness and Response network is that we are able to leverage the expertise from our partners and disciplines across our 3 counties. Thank you to all of those individuals and organizations who have contributed their time and expertise to our committees and projects. Your involvement has had a direct impact on our collective success.

OUR TEAM

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¹ Note: EPR fully funds the Regional Epidemiologist position placed in the TCHD Division of Epidemiology, Planning and Communication