



2007 San Diego Wildfires: Lessons Learned

Wilma J. Wooten, M.D., M.P.H.

Public Health Officer

County of San Diego

Health and Human Services Agency

Overview

- Review results of wildfire event
- Review EOC/EMS DOC structure
- Identify key surveillance features
- Outline successes and lessons learned



2007 San Diego Wild Fires: Lessons Learned

**OVERVIEW OF
FIRESTORM 2007**

Significant Damage

- Over 12 Fires burned during the Emergency
- Over 15 % of the County of San Diego



The Result

- 368,000 acres burned



**1,751 residences
and businesses
destroyed**

Largest Evacuation in California History



- Approximately 515, 000 people evacuated
- Over 2,200 medical patients evacuated

Medical Scope of the Disaster

- 23 civilian injuries
- 89 firefighter injuries
- 10 fire related deaths



Evacuations

- Reverse 911 – 587,000 calls made
- 515,000 residents evacuated



Evacuations

- Ambulance Strike Teams to evacuate medical facilities
- 3 Hospitals evacuated (2 Acute Care Hospitals and Psychiatric Hospital)
- 12 Skilled Nursing Facilities evacuated



Mass Care & Shelter



Max of
45
Shelters

Medical Reserve Corp

- 876 members currently
- 260 members replied with their availability
- 66 members deployed:
 - 48 Nurses
 - 15 Physicians
 - 1 Nurse Practitioner
 - 1 Physician Assistant
 - 1 Respiratory Therapist
- *Also received support from State CalMat (1) and federal DMat (2) Teams*





2007 San Diego Wildfires: Lessons Learned

EOC / EMS DOC

Disaster Coordination

- Emergency Responders work in field operations
- County of San Diego, Office of Emergency Services maintains the Operational Area Emergency Operations Center (**EOC**)
- The County of San Diego, EMS maintains the Department Operations Center (DOC) also known as the Medical Operations Center (MOC)

Emergency Operations Center (EOC)

- Strategic Operations
- Decision-makers
- Medical/Health
- Regional coordination of state and federal resources
- Mutual Aid



EOC Operations

- Leadership
- 85 Agencies
- Situational Awareness – WebEOC



Web EOC

- Over 400 users logged in and contributed to the County Wide Significant Events Board
- 775 Entries from 85 agencies Data-linked to the County wide Events Board

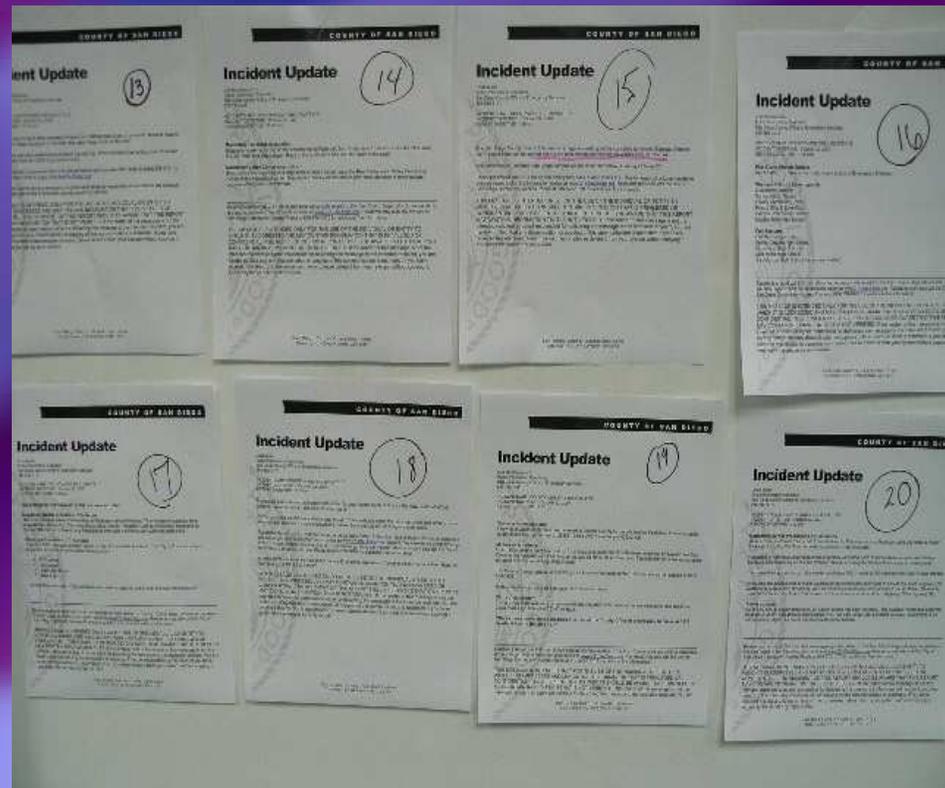
The screenshot shows a Microsoft Internet Explorer window titled 'old County Wide Significant Events Display - Microsoft Internet Explorer'. The page displays a list of events in a table-like format. Each entry includes a title, priority, accuracy, source, record number, author, and timestamp.

Event Title	Priority	Accuracy	Source
Fire	HIGH	Fact	Camp Pendleton and Metrolink
Record #: 1102	The Horno Fire on Camp Pendleton is 6000 acres and moving north and west (between Las Pulgas and Border Patrol Checkpoint. Camp Pendleton requested closure of Interstate 5 at approximately 1:00 a.m. They also requested closure of train service. Metrolink confirmed that the train service is shut down from Oceanside to San Clemente.		
Susan Asturias - OAEOC Operations Section Chief			
Posted: 10/24/2007 03:34:49			
Original: 10/24/2007 03:25:23			
Evacuation	(Select)	Fact	Aline
Record #: 1100	Mandatory Reverse 911 call placed to residents of DeLuz. TBros pages 996 (ABCDE1-2, F1-6, G1-4, H1-5, J1-5) and 997 (A1-4, B1-5, CDE1-6, FGH1-7) Residents advised to evacuate via DeLuz/Murrieta Rd. North or North Sandia Creek towards Riverside		
Kathy Wagner - SHF DOC Documentation/Scribe			
Posted: 10/24/2007 03:30:07			
Original: 10/24/2007 03:08:51			
Fire	MEDIUM	Fact	Lt. Bickel
Record #: 1098	Lt. Bickel at advises that there is a significant flare-up in the area of four corners (TB 1294 E2) with the fire spreading west. Fire resources are on scene and making a stand. Other areas are quiet in the Jamul area.		
Lt. Mike Barnett - SHF DOC Planning/Intel Chief			
Posted: 10/24/2007 01:50:25			
Original: 10/24/2007 01:41:45			

Page 14 Disable Refresh

EOC Joint Information Center

- Over 200 press releases
- 211 – 109,000 calls received in first week
- Emergency and a Response Website



EMS DOC

- 2003 After Action Report recommendations
- Grant funding used to create and enhance EMS DOC
 - Telecommunications
 - Information sharing
 - Radio
 - Video conferencing



Role of EMS DOC

- Responsibilities are to:
 - Identify and address medical and health system Issues
 - Coordinate the Hospital and Prehospital System
 - Coordinate the Evacuation of Medically Fragile Populations
 - Communicate with healthcare community

Staffing the EMS DOC

- EMS staff positions
 - Operations
 - Logistics
 - Planning
 - Finance
 - IT support
 - Medical Director
 - Epidemiology/GIS Mapping
 - Emergency Medical Alert Network (EMAN)
 - Medical Reserve Corps (MRC)



- ***Adding PHS staff positions***
 - Public Information Officer
 - Deputy Public Health Officer
 - Public Health Nurses
 - SNS/CRI Coordinator
 - Community Epidemiology

Community Partners at EMS DOC

- Hospital Association
- Medical Society
- Base Hospital Nurse Coordinator
- Council of Community Clinics
- Medical Reserve Corps
- Ambulance Coordinator
- ARES





2007 San Diego Wildfires: Lessons Learned

KEY SURVEILLANCE FEATURES

Surveillance of Health Issues

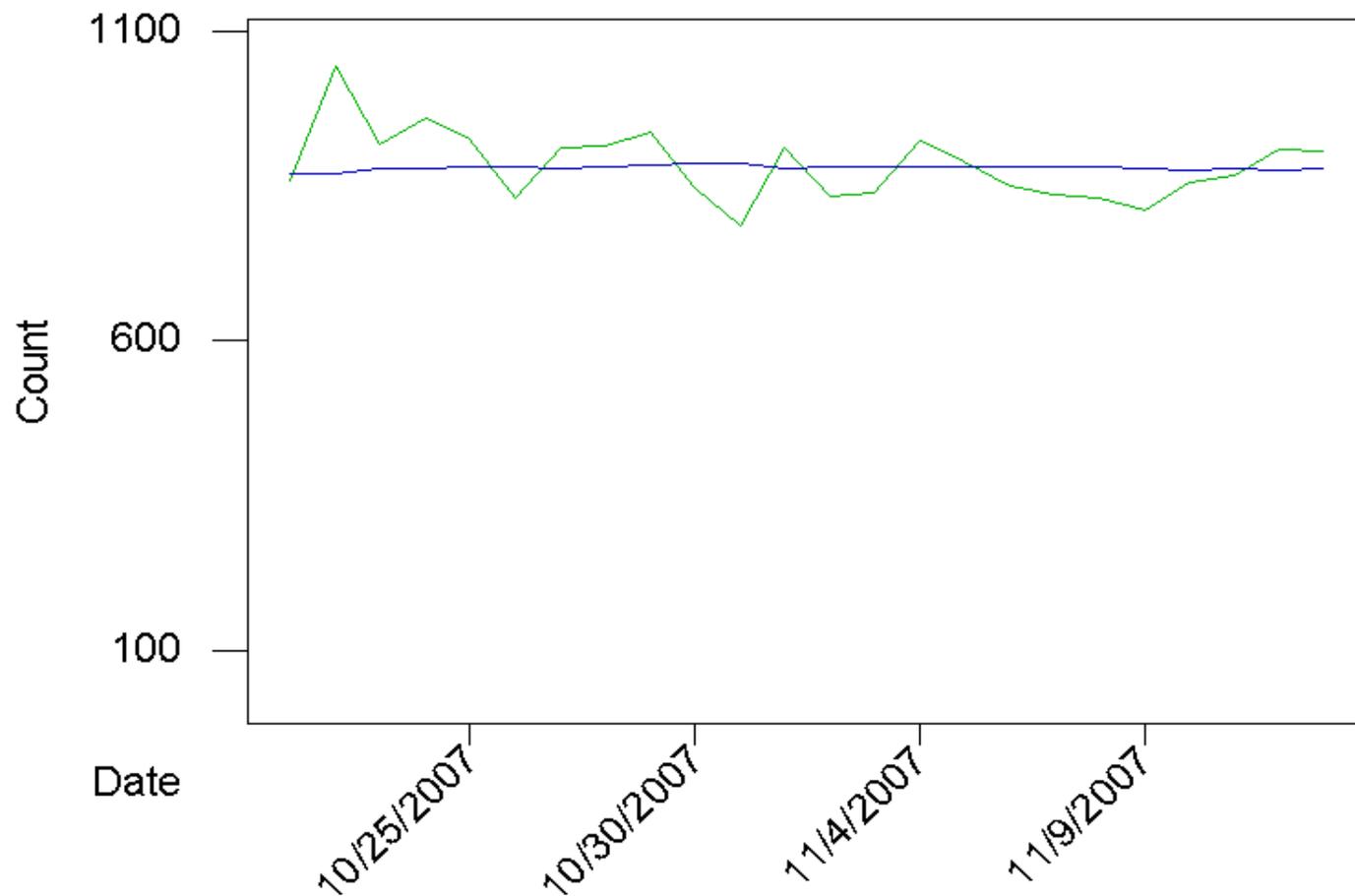
- Infectious Disease at Shelters
- Air Quality
- Water Quality

Air Quality Index

Air Quality Index (AQI) Values	Levels of Health Concern	Colors
<i>When the AQI is in this range:</i>	<i>...air quality conditions are:</i>	<i>...as symbolized by this color:</i>
0 to 50	Good	Green
51 to 100	Moderate	Yellow
101 to 150	Unhealthy for Sensitive Groups	Orange
151 to 200	Unhealthy	Red
201 to 300	Very Unhealthy	Purple
301 to 500	Hazardous	Maroon

Total Emergency Department Visits* 10/21/2007-11/14/2007

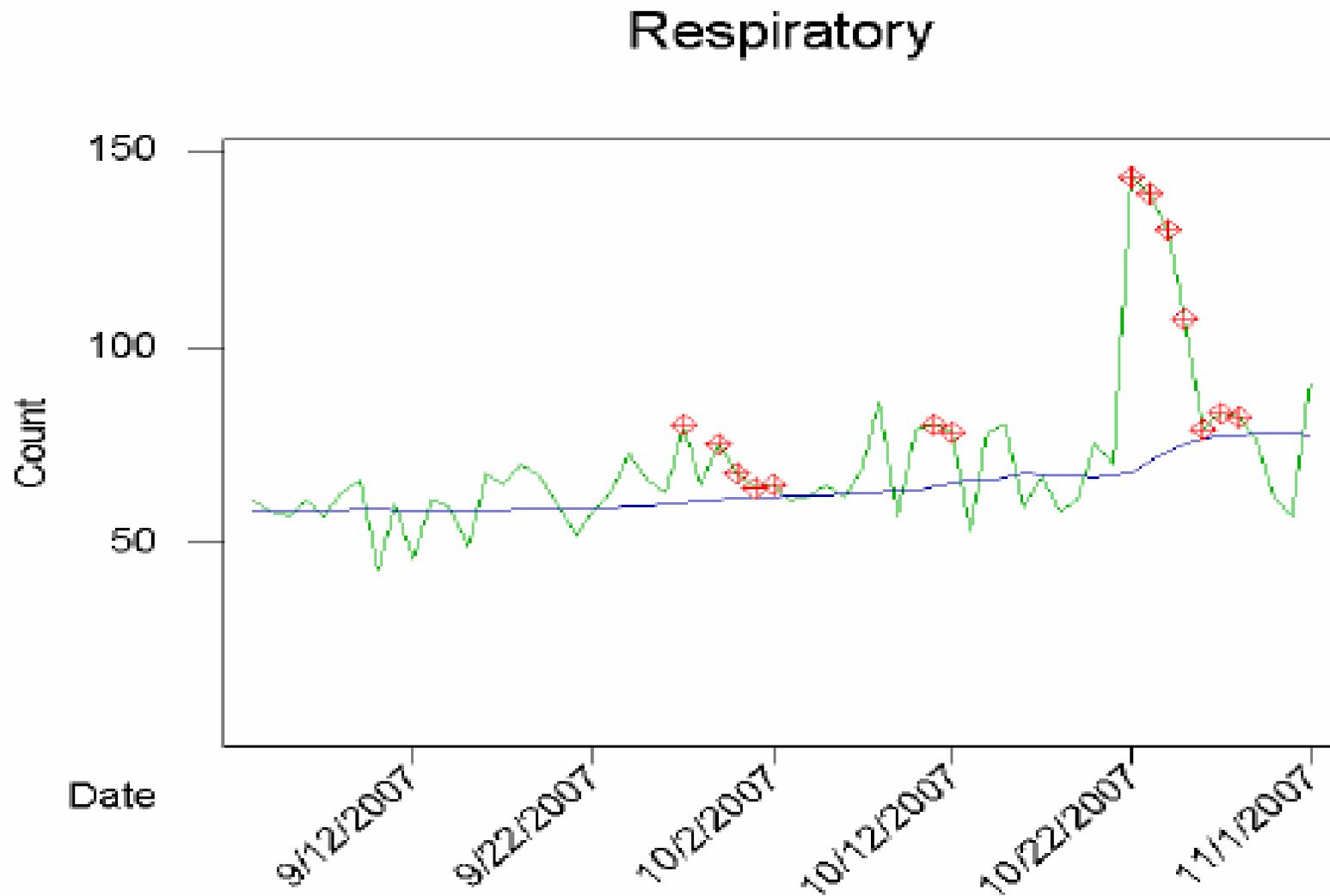
Total Emergency Department Visits



* - from 8 participating hospitals

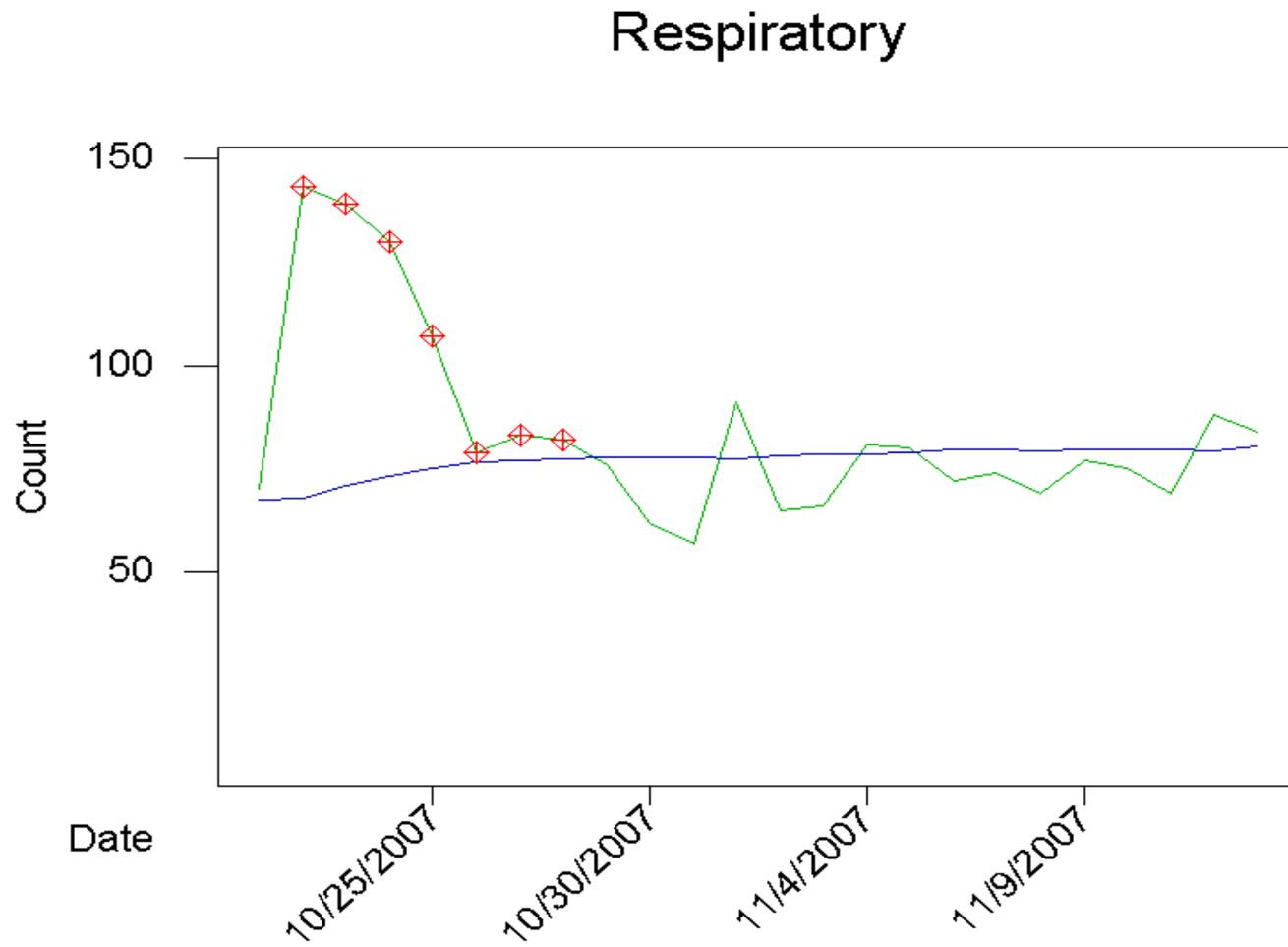
30 day baseline

Surveillance of Respiratory Visits



Emergency Department Visits for Respiratory Symptoms*

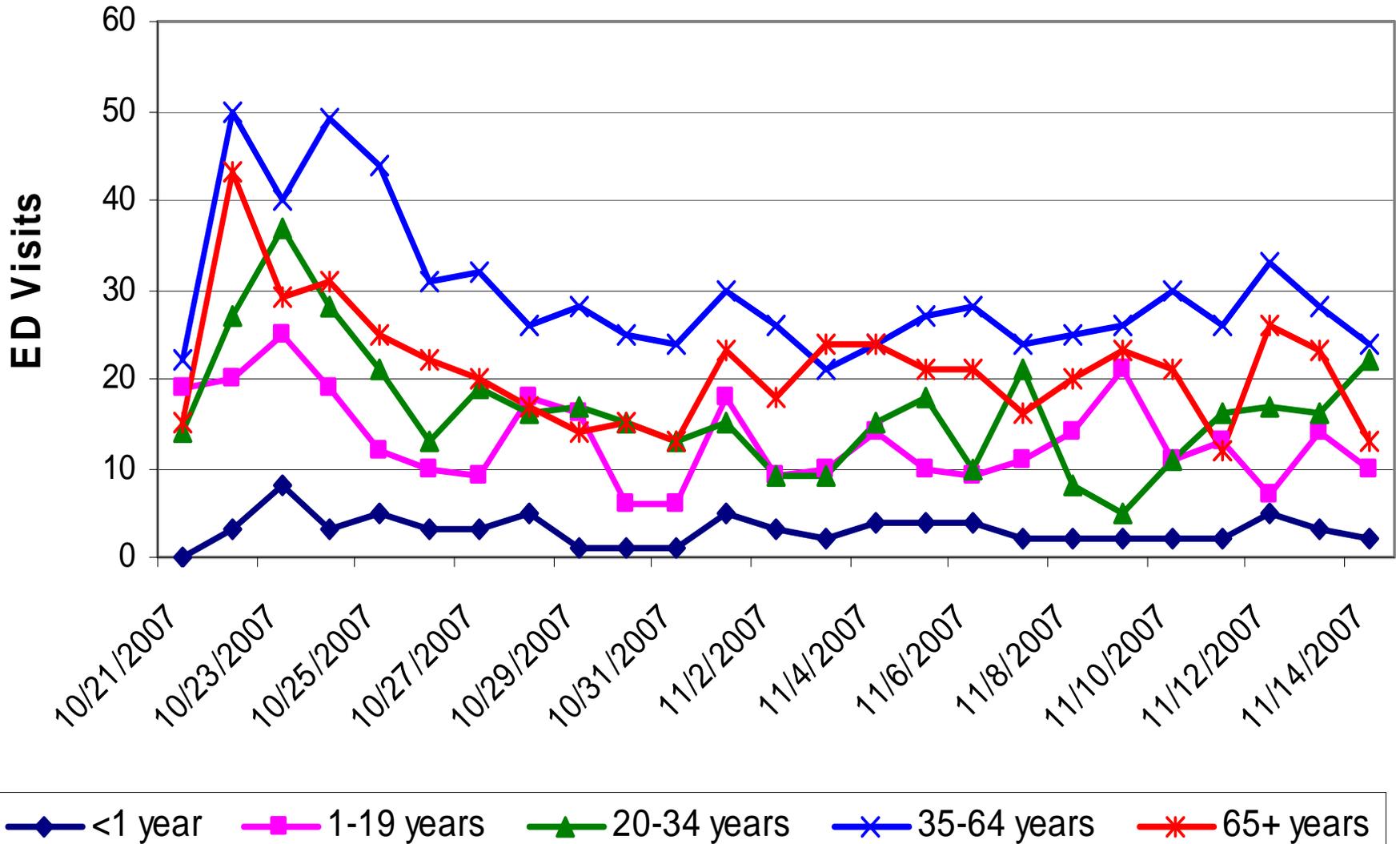
10/21/2007-11/14/2007



* from 8 participating hospitals

— 30 day baseline

Emergency Department Visits for Respiratory Symptoms by Age, 10/21/2007 - 11/14/2007





2007 San Diego Wildfires: Lessons Learned

**SUCSESSES and
LESSONS LEARNED**

Success of Firestorm 2007

- Standardized Emergency Management System (SEMS)
(Command)
- Previous Experience
(Communication)
- Partnerships and Volunteerism
(Collaboration)



Previous Experience (*Firestorm 2003*)

- Recommendations from 2003
 - Joint Information Center (improve)
 - EMS DOC (MOC)
 - Web EOC
 - Reverse 911



2007 Successes In Communication

- Communication systems (CASS and EMAN) were successful in getting critical information to hospitals, clinical providers, and first responders in a timely manner.

- The use of WebEOC significantly improved communication ability in the MOC and with hospitals and outside agencies.

- Greater communication to the media via over 200 media

Communicating Public Messages

- Close proximity in District staff
- Daily check-ins
- Inclusion of daily District reports in all public communications

Joint Information Center Center (improved communication)

Lessons Learned Firestorm 2007

- Increase communication with the local American Lung Association (added to WebEOC)
- Improve



County of San Diego

Health and Human Services Agency

www.sdcounty.ca.gov

Questions?

