CERT Basic Training

Unit 1: Disaster Preparedness



CERT COMMUNITY EMERGENCY RESPONSE TEAM

THE CITY OF BURLINGAME CALIFORNIA INCORPORATED 1908

TOWN OF HILLSBOROUGH INCORPORATED MAY V ADMCMXI

MILLBRAE

U.S. DEPARTMENT OF HOMELAND SECURITY

FEMA

Setting the Stage

- CERTs are able to:
  - Assist emergency services personnel when requested in accordance with standard operating procedures (SOPs) developed by the sponsoring agency and by area of training
  - Assume some of the same functions as emergency services personnel following a disaster
  - Prepare families and communities prior to emergencies and assist neighbors during an emergency when first responders are not immediately available

PM 1-1

Course Preview

- Unit 1: Disaster Preparedness
- Unit 2: CERT Organization
- Unit 3: Disaster Medical Operations, Part 1
- Unit 4: Disaster Medical Operations, Part 2
- Unit 5: Disaster Psychology
- Unit 6: Fire Safety and Utility Controls
- Unit 7: Light Search and Rescue Operations
- Unit 8: Terrorism and CERT

PM 1-1

Unit Objectives

1. Describe the functions of CERT, discuss your role as a CERT volunteer, and explain how CERT fits into your community's emergency preparedness structure
2. Describe the types of hazards most likely to affect your communities and their potential impact on people, health, and infrastructure
3. Prepare yourself and your family for potential disasters your community may face, including learning to create a family disaster plan and emergency preparedness kit

PM 1-1

Exercise 1.1



- Work in groups of five to design and construct a free-standing tower that stands at least 5 feet tall from the bottom of the structure to the top
- You will have a total of 10 minutes. Spend the first 5 minutes planning and designing the tower as a group. While you are planning, you should not touch any of the materials
- Wait to be told when to begin construction and you will have 5 minutes from that point to complete the tower

PM 1-2

Examples of Disasters

What are some significant disasters that have occurred around the globe?

Examples of Disasters

- Myanmar – Earthquake (March 2025)
  - 7.7 magnitude
  - 5,400+ fatalities
  - 11,400+ injuries
  - ~$11+ billion USD in damage





Examples of Disasters

- Los Angeles – Wildfires (January 2025)
  - 57,000+ acres of land burned
  - 30+ fatalities
  - 200,000+ people evacuated
  - 18,000+ structures destroyed
  - ~$250+ billion USD in damage





Examples of Disasters

- Turkey & Syria – Earthquake (February 2023)
  - Twin earthquakes of 7.8 and 7.7 magnitude
  - 60,000+ fatalities
  - 120,000+ injuries
  - ~$157+ billion USD in damage

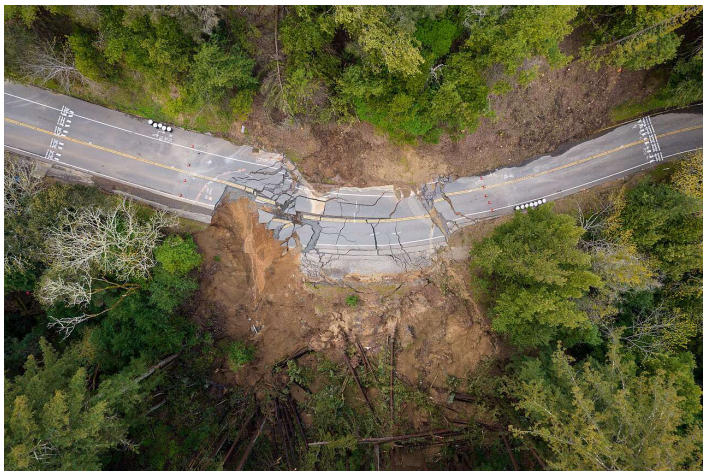




Examples of Disasters

- California – Winter Storms (December 2022)
  - Heavy rainfall caused by multiple atmospheric rivers
  - 200,000+ homes and businesses without power
  - 6,000+ people evacuated
  - 22+ fatalities
  - ~$4.6+ billion USD in damage





Examples of Disasters



Examples of Disasters

- Indian Ocean Earthquake & Tsunami (December 2004)
  - 9.2-9.3 magnitude earthquake
  - Tsunami with ~100ft. high waves
  - 227,000+ fatalities
  - 1.7+ million people displaced
  - ~$13+ billion USD in damage





Examples of Disasters



Examples of Disasters

- Loma Prieta Earthquake (October 1989)
  - 6.9 magnitude
  - 63 fatalities
  - 3,700+ injured
  - 12,000+ people displaced
  - $6+ billion USD in damages

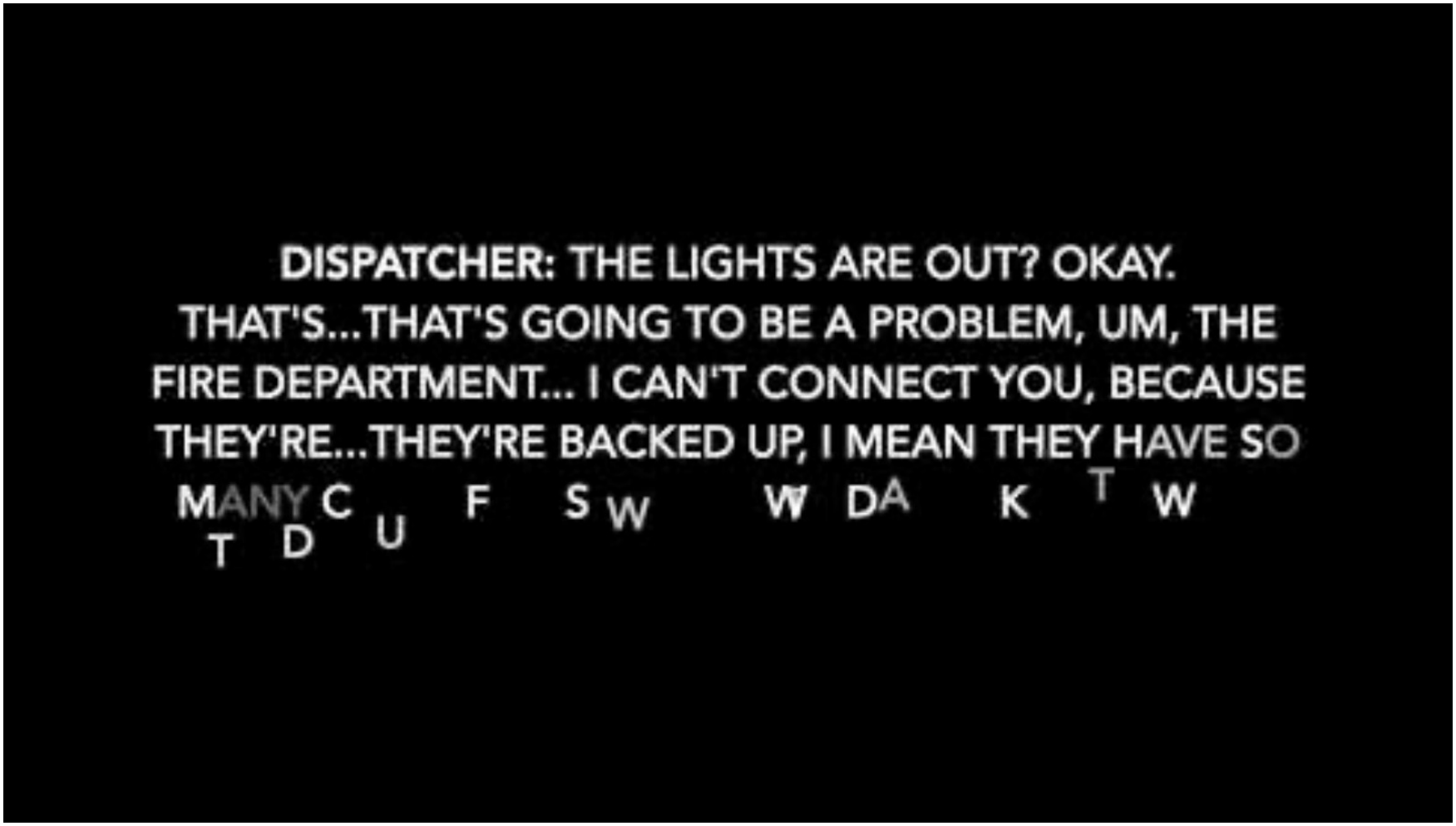




Examples of Disasters



Examples of Disasters



Examples of Disasters

- Boston Marathon Bombing (April 2013)
  - Pressure cooker bombs detonated near the finish line
  - 3 fatalities
  - 16 traumatic amputations
  - 269 injured



Examples of Disasters

- 9/11 Terrorist Attacks (September 2001)
  - Four coordinated suicide attacks; hijacking of commercial airliners
  - 2,996 fatalities
  - 6,000-25,000+ injured
  - ~$83 billion USD in damages
    - *Likely higher due to economic impact*



Community Preparedness Roles



- Preparedness is important for communities of all sizes across the Nation
  - Key priority in lessening the impact of disasters
  - Critical that all community members take steps to prepare
  - Effective when addresses unique attributes of community and engages whole community

PM 1-3

Government

- Government has responsibility to:
  - Develop, test, and refine emergency plans
  - Ensure emergency responders have adequate skills and resources
  - Provide services to protect and assist citizens

PM 1-3

Emergency Operations Plan (EOP)



- All government agencies with a role in disaster response work to organize and coordinate their agencies' activities before an emergency or disaster using EOP's:
  - Assigns responsibility to organizations and individuals
  - Sets forth lines of authority
  - Describes how people and property will be protected
  - Identifies personnel, equipment, facilities, supplies, and other resources

PM 1-3

Community Leaders

- Have a responsibility to participate in community preparedness:
  - Participate on local collaborative planning council
  - Identify and integrate appropriate resources into government plans
  - Ensure facilities, staff, and customers served are prepared

PM 1-4

The Public

- Learn about community alerts, warnings, and evacuation routes
- Take training
- Practice skills and personal plans
- Network and help others
- Provide feedback to community
- Report suspicious activity
- Volunteer

PM 1-4

Engaging the Whole Community



- Whole Community approach to emergency preparedness seeks to engage the full capacity of society
- Relationships and social connections are the foundation for a more resilient community that can bounce back after a disaster
- Community coalitions strengthen relationships and provide a framework for organizing community preparedness efforts

PM 1-4

Get Involved

- Preparedness requires active participation from all
  - Talk to friends and family about hazards
  - Ask about emergency planning outside the home
  - Make sure those in charge have a plan
- Training provides skills needed to help others and keeps skills current
  - CERT program provides training, practice, and connection to others
  - Participate in drills and exercises
  - Talk to friends and family about volunteering

PM 1-5

Types of Disasters



- **Natural** (e.g., earthquakes, wildfires, floods, extreme heat, hurricanes, landslides, thunderstorms, tornadoes, tsunamis, volcanic eruptions, winter storms)
- **Technological & Accidental** (e.g., hazardous material spill, nuclear power plant accident)
- **Terrorism** (e.g., chemical, biological, radiological, nuclear, explosive weapons)

Key Disaster Elements

- They are relatively unexpected
- Emergency personnel may be overwhelmed
- Lives, health, and the environment are endangered

PM 1-6

Local Hazard Vulnerability

- Identify most common disasters that occur
- Identify possible hazards with most severe impact
- Consider recent or historical impacts
- Identify susceptible locations in the community for specific hazards
- Consider what to expect from disruption of services

PM 1-6

Infrastructure Damage

- Resources will be applied to the highest priority need:
  - Police will address incidences of grave public safety
  - Firefighters will suppress major fires
  - EMS personnel will handle life-threatening injuries

PM 1-7

Damage Related to Structure Type



- You may not have opportunity to select type of structure when a disaster occurs
- Engineered buildings have performed well in most types of disasters
- Types of damage vary by structure
- Differences in hazards and mitigation between single-family homes and multiple-unit dwellings

PM 1-8

Home Hazards

- Gas line ruptures from water heaters or ranges displaced by shaking, water, or wind
- Damage from falling books, dishes, or other cabinet contents
- Risk of injury or electric shock from displaced appliances and office equipment
- Fire from faulty wiring, overloaded plugs, frayed electrical cords

PM 1-9

Preparing for a Disaster



- Know local hazards, alerts, warning systems, evacuation routes, and sheltering plans
- Consider important elements of disaster preparedness
- Address specific needs for yourself and people you know

PM 1-10

Preparing for a Disaster

SMC Alert
San Mateo County Alert System

genasys Protect
FORMERLY ZONEHAVEN AWARE

MyShake™

Preparing for a Disaster



- Have the skills to evaluate the situation quickly and take effective action to protect yourself
- Have a family disaster plan and practice the plan with drills
- Assemble supplies in multiple locations
- Reduce the impact of hazards through mitigation practices
- Get involved by participating in training and volunteer programs

PM 1-10

Family Disaster Plan

- Where will you meet family members?
- Who is your out-of-state “check-in” contact?
- Will you have an extended stay? Shelter in place? Evacuate?
- How will you escape your home? Workplace? School? Place of worship?
- What route (and several alternates) will you use to evacuate your neighborhood?
- Do you have transportation?
- Did you practice your plan?

PM 1-12

Important Phone Numbers

Burlingame

Police (Emergency): 911 or 650-692-0310
Police (Non-Emergency): 650-777-4100

Fire (Dispatch): 911 or 650-368-1421
Fire (Administration): 650-558-7600

Public Works (Main Line): 650-558-7670 or 650-558-7230
Public Works (After-Hours – Police): 650-692-0604

Important Phone Numbers

Hillsborough

Police (Emergency): 911 or 650-375-7470
Police (Non-Emergency): 650-375-7470

Fire (Dispatch): 911 or 650-368-1421
Fire (Administration): 650-558-7600

Public Works (Main Line): 650-375-7444
Public Works (After-Hours – Police): 650-375-7470

Important Phone Numbers

Millbrae

Sheriff's Office (Emergency): 911 or 650-697-1212
Sheriff's Office (Non-Emergency): 650-259-2300

Fire (Dispatch): 911 or 650-368-1421
Fire (Administration): 650-558-7600

Public Works (Main Line): 650-259-2339
Public Works (After-Hours – PSC): 650-363-4951

Important Phone Numbers

San Bruno

Police (Emergency): 911 or 650-877-8989
Police (Non-Emergency): 650-616-7100

Fire (Dispatch): 911 or 650-368-1421
Fire (Administration): 650-616-7096

Public Works (Main Line): 650-616-7065
Public Works (After-Hours – Police): 650-616-7100

Important Phone Numbers

Miscellaneous

Poison Control: 800-222-1222

Pacific Gas & Electric (PG&E): 800-743-5000
Life safety issues: Call 9-1-1, then PG&E.

Peninsula Human Society & SPCA
Animal Rescue & Control Dispatch: 650-340-8200
After-Hours – PSC: 650-363-4953

Disaster Supply Kit

- After disaster strikes, you will not have time to shop or search for supplies
- If you gather supplies in advance, you and your family will be better equipped for an evacuation or home confinement
- Many of the items needed for your kits are already in your household
  - These items can be assembled in appropriate locations for quick access in an emergency but used under normal circumstances whenever needed

PM 1-13

Disaster Supply Kit

WATER

Save up to 3 gallons per person, for drinking and washing.



Be sure that you've got 3 days worth of water (1 gallon per person/per day)

FOOD

Set aside foods that won't spoil and require no cooking

You know best what you and your family like to eat.



TRASH BAGS

Set aside extra plastic bags, with ties, to use in a bucket for a toilet.



Go Bag

TO PACK NOW

DOCUMENTS

Copies of identification and insurance.

Deeds, titles, and other papers important to you

Photos of family and pets.



CASH

Small bills $1s & $5s.

Save up a little at a time.



MAP

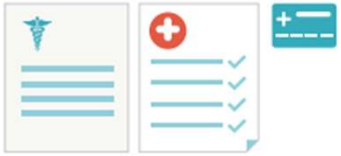
Mark different routes out of your neighborhood on a paper map.



MEDICATIONS LIST

List all prescriptions.

Other important medical information.



PACK AS YOU LEAVE

- Wallet or purse and keys
- Phone and charger
- Medicine
- Mask



GRAB IF YOU HAVE

- Portable radio
- Flashlight
- First aid supplies
- Portable computer

Escape Planning

- Consider needs of children and individuals with access and functional needs
- Inform all family members or office coworkers of the plan
- Run practice escape drills

PM 1-17

Exercise 1.2

- Take the scenario given and decide what things to bring with you and/or what to do in the time available

PM 1-18

Protective Actions

- Assess situation
- Decide to stay or change locations
  - This is a critical early decision in disasters
- Seek clean air and protect breathing passages
- Protect from debris and signal if trapped
- Remove contaminants
- Practice good hygiene

PM 1-18

Sheltering

- **Shelter in place: sealing a room**
  - Identify internal room
  - Stay for several hours
  - Store supplies
- **Shelter for extended stay**
  - Stay for several days or up to 2 weeks
  - Store emergency supplies
- **Mass care or community shelter**
  - Take 3-day disaster kits
  - Shelters provide most supplies

PM 1-19

Mitigation

- Mitigation is the reduction of loss of life and property by lessening the impact of disasters and includes any activity that prevents an emergency or reduces effects of hazards
- CERT members should have adequate homeowners coverage
  - Add flood insurance if in a flood hazard area

PM 1-20

Structural Mitigation Measures

- Bolt houses to foundations
- Install trusses or hurricane straps to reinforce roof
- Strap propane tanks and chimneys
- Strap mobile homes to their slabs
- Raise utilities
- Build a safe room

PM 1-20

Non-Structural Hazard Mitigation

- Anchor heavy furniture
- Secure appliances and office equipment
- Childproof cabinet doors
- Locate and label gas, electricity, and water shutoffs
- Secure water heaters and have flexible gas lines installed
- Install hurricane storm shutters

PM 1-20

Fortifying Your Home

- Non-structural hazard mitigation by disaster type:
  - Home fires: Burglar bars and locks on outside window entries easy to open from the inside
  - Landslides: Flexible fittings are more breakage resistant
  - Wildfires: Reduce fuel sources
    - Avoid wooden shakes and shingles
    - Clear flammable vegetation up to 30 feet from home and remove climbing vines from walls of home

PM 1-21

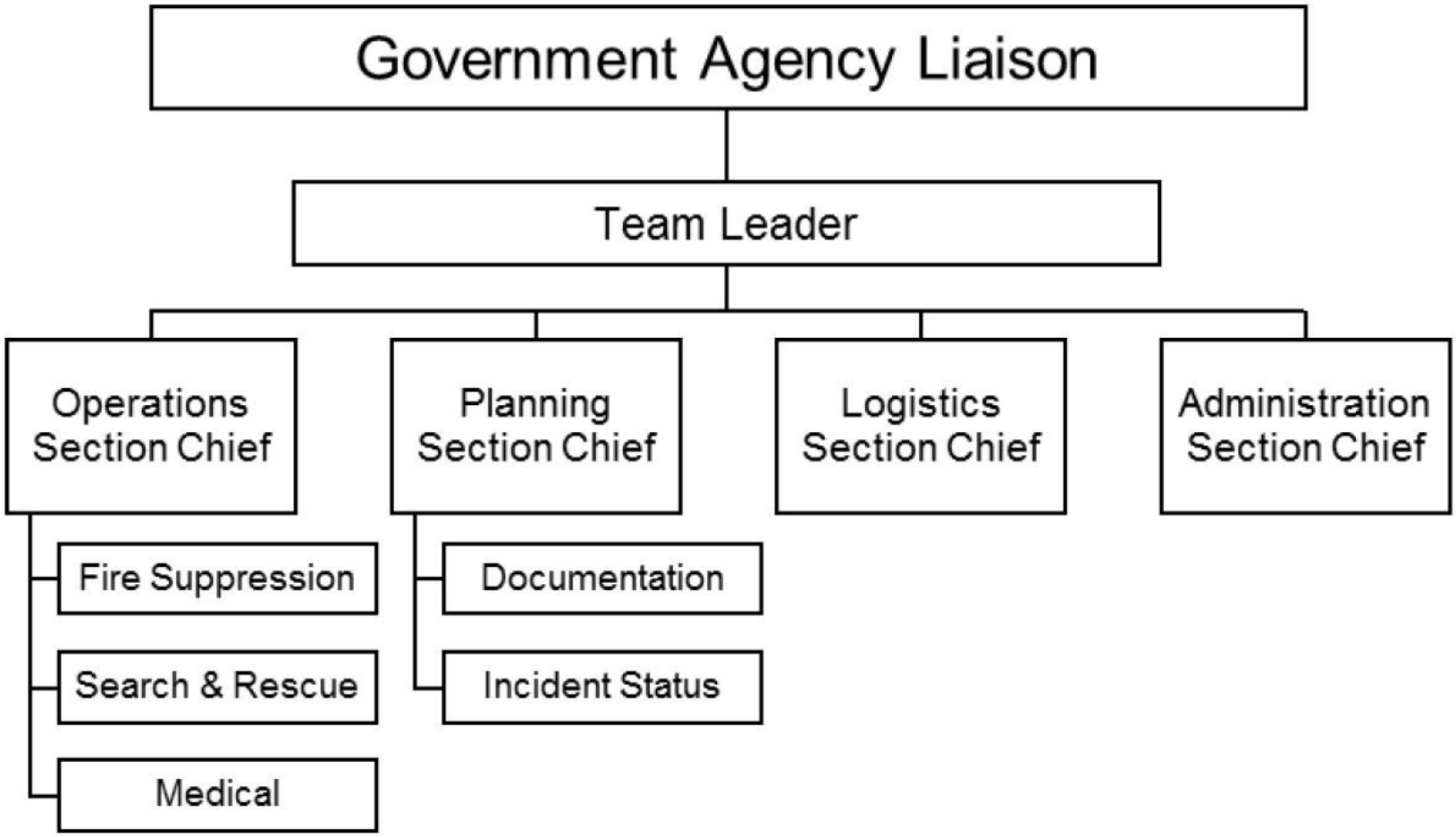
CERT Disaster Response



- CERTs respond post-disaster by:
  - Treating life-threatening injuries until professional assistance is available
  - Helping disaster survivors cope with their emotional stressors
  - Identifying hazards and supporting utility control
  - Assisting with damage assessment and communications
  - Supporting evacuation, shelter, and other community response needs

PM 1-22

CERT Organization



PM 1-23

Personal Protective Equipment

- Helmet
- Goggles
- N95 Mask
- Gloves (work and non-latex)
- Sturdy shoes or work boots



PM 1-24

CERT in Action







PM 1-24

Non-Disaster Roles

- Promote preparedness at community events
- Support CERT classes, Skills Days, and other training
- Participate in exercises
- Support neighborhood preparedness drills
- Practice emergency communications and support CCFD public education activities



PM 1-24

Protection for Disaster Workers

- CERT members are generally protected by:
  - "Good Samaritan" laws
  - Volunteer Protection Act of 1997
  - Relevant State statutes

PM 1-24

2025 Annual Report



Central County Fire Department

Community Emergency Response Team (CERT) Program

2025 Annual Report

Community Preparedness. Trained Neighbors. Stronger Together.

Serving Burlingame, Hillsborough, and Millbrae

bitly

2025 ANNUAL REPORT

By the Numbers: 2025

4 Basic Training Sessions

91 Instructional Hours

107 CERT Members Trained

20 Teen CERT Members

English + Mandarin Chinese
Languages Offered

28 Public Education & Outreach Events

350+ Volunteer Hours Contributed

9,000+ Community Members Reached*



*Outreach reach figures are estimated based on observed volunteer interactions and distribution of outreach materials during public education events.

5

2026 Team Meetings

2026	
Wednesday, January 21 6:00PM – 8:00PM Burlingame Community Center	**"Responding to Gas & Electric Emergencies for CERT Members" Training by Pacific Gas and Electric (PG&E).** *Firefighters, police, EMTs, public works, and CERT members are often first on scene where gas or electrical hazards may be present. Learn how to identify them, take proper safety measures, and contact the utility.*
February	**No Meeting** ***CERT Basic Training (English)*** *on Tuesday and Thursday evenings from February 3 to 26; Skills Day on February 28.*
Wednesday, March 18 6:00PM – 8:30PM David J. Chetcuti Community Room (Millbrae)	**ShakeAlert Ready CERT and CERT Earthquake Annex Training.** *Learn how ShakeAlert-powered earthquake early warnings work, along with key earthquake science fundamentals and what to expect before shaking begins. The session also covers CERT's initial actions after a major earthquake, damage assessments, and localized guidance from San Mateo County's earthquake risk profile.*
April	**No Meeting** ***CERT Basic Training (Mandarin)*** *on Tuesday and Thursday evenings from March 24 to April 16; Skills Day on April 18.*
Wednesday, May 20 6:00PM – 8:00PM Burlingame Community Center	**Volunteer Appreciation Event by Central County Fire Department.** *Join us in May for a special celebration of our CERT volunteers. Enjoy light refreshments, well-deserved recognition, and time to connect with your fellow CERTs.*
Wednesday, June 17 6:00PM – 8:00PM Burlingame Community Center	**CERT Animal Response Annex Training.** *Learn how to safely assist animals in disasters through an overview of behavior, approach techniques, evacuation and sheltering basics, and the key differences between human and animal response.*
Wednesday, July 15 6:00PM – 8:00PM David J. Chetcuti Community Room (Millbrae)	**CERT Emergency Communications Annex Training.** *Learn how emergency communications work for professional responders and where CERT fits into that structure, including when and how teams communicate during incidents, followed by hands-on team exercises.* ***Teen CERT Boot Camp*** *all-day on Saturday and Sunday – exact dates TBD*
Wednesday, August 19 6:00PM – 8:00PM Hillsborough Town Hall	**Advanced Bleeding Control (Stop the Bleed) Training.** *Build essential skills for responding to severe bleeding emergencies through hands-on practice with direct pressure, wound packing, and proper tourniquet application to provide lifesaving care before EMS arrives.*
Wednesday, September 16 6:00PM – 8:00PM David J. Chetcuti Community Room (Millbrae)	**Introduction to the Incident Command System, ICS 100.** *Learn the basics of ICS, including incident organization, common terminology, and core roles, and understand how CERT fits into the broader ICS and NIMS structure during emergency operations.*
October	**No Meeting** ***CERT Basic Training (English)*** *on Tuesday and Thursday evenings – exact dates TBD*
Wednesday, November 18 6:00PM – 8:30PM Burlingame Community Center	**CERT Unit 7 (Light Search & Rescue) Refresher Training.** *Review essential search techniques, building size-up, safe lifting and cribbing practices, and basic victim extrication, followed by hands-on team exercises to reinforce skills.*
Wednesday, December 16 6:00PM – 8:30PM David J. Chetcuti Community Room (Millbrae)	**CCFD CERT Annual Holiday Party.** *An annual favorite, the Millbrae CERT Holiday Party is opening its doors this year to volunteers from all three cities. Join us for an evening of celebration, connection, and fun as we wrap up another great year of CERT service.*

Additional Training

- Advanced first aid
- Animal issues in disasters
- Automated External Defibrillator (AED) use
- Community relations
- CPR skills
- Debris removal
- Donations management
- Shelter management
- Special needs concerns
- Traffic/crowd control
- Utilities control
- Volunteer management
- Online courses (IS)

PM 1-26

Unit Summary

- You should now be able to:
  - Identify roles and responsibilities for community preparedness
  - Describe types of hazards that affect communities, people, health, and infrastructure
  - Undertake personal and organizational preparedness actions
  - Describe functions of CERTs

PM 1-27

Homework Assignment

- Review the detailed information in Unit 1 of the Participant Manual
- Read and familiarize yourself with Unit 2: CERT Organization in the Participant Manual
- Discuss preparedness with family and friends and make a communications plan, including an out-of-state “check-in contact ”
- Begin to assemble supplies in multiple locations
- Examine your home for hazards and identify ways to prevent potential injury

PM 1-27