

INTRODUCTION

The vision for the Caltech Crisis Management Council (CMC) is to assist our campus community to prepare for, respond to and recover from any disruption and sustain core research, teaching, and critical operations. For the last two years, the Institute has met this challenge in responding to the SARS-CoV-2 global pandemic. While the Institute's response capabilities have been strengthened by the experience, responding to the pandemic took priority and several planned trainings and exercises for 2021 were canceled or re-scheduled to 2022. Below is a summary of incidents, exercises and trainings, and planning efforts that occurred in 2021, as well as the objectives and exercises planned for 2022.

INCIDENTS/EVENTS

SARS-CoV-2 Global Pandemic

Response to the SARS-CoV-2 pandemic continued throughout 2021. Ongoing adherence to local public health guidance was essential, including the continuation of measures which prevent the spread of COVID-19 such as masking and distancing; maintaining healthy environments through cleaning and air exchange assessments; responding to cases on campus, and conducting surveillance testing, all of which proved to be critical strategies in mitigating the impact to campus.

Vaccination against COVID-19 became available to the Education Sector in the spring of 2021. Several "opt-in" vaccine clinics were held on campus in the spring to meet enthusiastic demand and booster clinics were offered in the fall to help promote and facilitate access to the vaccine. All members of the campus community, including visitors, are required to be up to date on their vaccination against COVID-19.

Response activities and recovery from the pandemic will continue into 2022.

EXERCISES AND TRAINING

- **Disaster Medical Tabletop Exercise – February 8**
A limited tabletop exercise was held with members of Student Wellness Services, Campus Security, and Environment Health and Safety to review initial response procedures for managing an emergency involving multiple injuries. Discussion focused on how procedures would be altered during COVID-19 conditions.
- **Water Filtration Unit Training - July 9**
Facilities personnel and members of Environment Health and Safety reviewed the Emergency Water Plan and practiced assembling the campus water filtration unit.
- **Disaster Recovery Team (DRT) building assessment training - August 24 & 25**
Disaster Recovery Team (DRT) members from Facilities and Faculty Housing participated in the annual building assessment training. The drill included team activation procedures, building assessment, and reporting protocols. Four sessions were offered over two days to allow for maximum attendance.

- Wildfire Smoke and Power Outage Tabletop Exercise - August 31**
 A tabletop exercise was held with members of the Emergency Operation Center to assess our Wildfire Smoke plan and Power Outage plan. A result from the exercise is that a work group was identified to develop predictive modeling for indoor air quality during wildfire smoke events.
- Incident Command Post exercise with the Pasadena Fire Department - October 6**
 Caltech Security and Environment, Health and Safety partnered with the Pasadena Fire Department to practice Command Post activation procedures, information sharing, and response coordination during a simulated rescue operation involving hazardous materials on campus.
- Building Evacuations - October 11-14**
 In coordination with annual Fire Bell testing, all campus building occupants were evacuated over four days of unannounced drills. Evacuation procedures, including assembly at designated “Emergency Assembly Areas” and the process for accounting for building occupants, were evaluated. Student Housing evacuations are conducted four times per year and occurred on March 1, June 30, August 24, and Oct 12
- Great California ShakeOut Drill – October 21**
 For the 14th consecutive year, members of the Caltech community practiced earthquake preparedness, at home or on campus, by following the “Drop, Cover and Hold On!” procedure during the annual Great ShakeOut Earthquake Drill.
- Functional Earthquake Exercise - November 4**
 The Emergency Operations Center, Hazmat Response Team, Disaster Recovery Teams, Security, and representatives from several Divisions participated in the annual exercise. Objectives focused on identifying functions that require in-person presence, practicing EOC activation and setup from a cold start, testing technical communication capabilities and protocols, and practicing field assessments.

PLANNING

- Campus Emergency Management Plan (CEMP)**
 The Caltech Campus Emergency Management Plan is under regular review and revision. Specific plans that were written or revised in 2021 include: Campus Alerts and Warnings, Active Shooter and Hostile Event Response, Disaster Medical, Earthquake, Family and Victim Assistance, and Wildfire Smoke. The next revision will be issued in the summer of 2022.
- Emergency Notifications**
 Additional emergency communication tools, involving beacons and digital signage intended to supplement existing mass notification capabilities, were reviewed in 2021. Beta testing and potential implementation of this new tool will begin in 2022.

CAMPUS OUTREACH AND EDUCATION

- Personal Preparedness Activities – October 21, 2021**
 The Personal Preparedness Fair is held annually in conjunction with the Great California ShakeOut. This year, a virtual presentation “The Earthquake Threat in California and What You Can Do to Prepare” was held by Margaret Vinci, Caltech's Manager, Office of Earthquake Programs, Communications & Outreach and SoCal ShakeAlert Regional Coordinator.

Online Personal Preparedness classes are held quarterly and provided on request.

STUDENT OUTREACH

- Virtual orientations for incoming students included information on emergency communications, fire safety, earthquake procedures, and active shooter.

2022 OBJECTIVES

- Continue to respond and recover from SARS-CoV-2
- Capture takeaways from SARS-CoV-2 in the After-Action Review (AAR) to strengthen infectious disease planning and Institute response to major emergencies
- Strengthen continuity planning efforts with academic, operational, and auxiliary Divisions and Departments.
- Implement applicable National Fire Protection Association (NFPA) 3000, Standard for Active Shooter/Hostile Event Response (ASHER) enhancements for increased ASHER readiness.
- Continue to strengthen Emergency Action Plans in academic, operational, and auxiliary Divisions and Departments.
- Continue to strengthen student readiness and awareness of emergency procedures.
- Develop predictive modeling for indoor air quality during wildfire smoke events

2022 PLANNED EVENTS AND EXERCISES

Note that this schedule is flexible and may change based on level of COVID-19 activity in the community

- Disaster Recovery Team training – March 2022
- Campus Violence Prevention Campaign – April 2022
- Pasadena Fire Department Tours - May 2022
- Building Evacuations - June 2022
- Emergency Operation Center refresher training – July 2022
- Division Control Center Workshop – July 2022
- Hazmat Team refresher training – August 2022
- ShakeOut Earthquake Drill and Personal Preparedness Activities - October 2022
- Functional Earthquake Exercise - November 2022
- Emergency response skills training sessions - throughout 2022

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