What CERT Volunteers Do on their Days Off

By Mary McBride

“...In addition to making new friends, seeing old ones, rediscovering my inner thespian, learning a lot about emergency response/training, and having fun, I volunteer because I walk away with the feeling of achievement, knowing that I may help save someone’s life.”

Christine Schwartz

Physics is what physics majors do late at night and Community Emergency Response is what CERT volunteers do whenever they can, even on their days off.

In this issue: excerpts from an article written by Gradiva Couzin concerning what we can learn about recovery from Christchurch, NZ; Sarah Jones reports on the residual impact of the 2014 quake on businesses in Napa; and Roger Sharpe follows up with one Napa reminder: the danger from unreinforced chimneys. He advises Berkeley homeowners with similar chimneys. Christine Schwartz and Victoria Legg explain the joys—and the serious need for—victim volunteers in practice disaster enactments.

Being a CERT volunteer doesn’t end in your neighborhood. It expands to include a perceptive eye as you travel and a willingness to share. Send your experiences and photos to mmcbride@ci.berkeley.ca.us for the Summer 2016 Newsletter by May 31st.
WHAT WE CAN LEARN FROM THE CHRISTCHURCH, NZ EARTHQUAKES: AN EXCERPT

By Gradiva Couzin

In 2010 and 2011, the coastal city of Christchurch, New Zealand (pop. 370,000) suffered a devastating series of earthquakes. The worst, a magnitude 6.3 quake on February 22, 2011, caused massive damage to structures and infrastructure. It was terrifying; people were knocked off their feet with the violent shaking. Over 7,000 people were injured and 185 people lost their lives. Thousands of aftershocks rattled homes and nerves for months.

The SF Bay Area has a 72% chance of a 6.7 or larger magnitude quake in the next 30 years: We are the “before” picture to Christchurch’s “after.” What can we learn from their experience? I traveled to Christchurch in July 2015 and spoke with Hugh Nicholson, Principal Urban Designer at Christchurch City Council. Here’s what I learned:

1. We will need our neighbors more than ever.
   Neighbors in Christchurch drew on a strong culture of self-reliance to help each other during the hardest times.

2. Your home or business may not be accessible for a long time.
   A military cordon blocked access to downtown Christchurch immediately after the February, 2011 quake, with the last barriers being removed more than two years later.

3. Recovery will take longer than we want it to.
   Although water and power were restored relatively quickly, it was about six months before sewer service was restored to almost all homes. Over four years later, abandoned buildings still dominate downtown Christchurch.

4. Art and community engagement will help.
   Artistic creations and events entertained, united, and inspired a weary population, and continue to bring hope for what’s to come.

5. Our city will never be the same again.
   Eight thousand homes in Christchurch were bulldozed and cannot be rebuilt. Authorities decided it was too dangerous or too expensive to rebuild or repair houses in those areas.

Many thousands in Christchurch lost their homes. They grieve what once was, and some of them still flinch every time a truck goes past. But people also feel more connected to their community and neighbors, and proud of their ability to cope. As outsiders in Christchurch, we were struck by a sense of quirkiness, excitement, innovation and entrepreneurship in the city that we didn’t notice elsewhere in New Zealand.

The changes that the Bay Area’s Big One brings won’t be reversible. Our collective consciousness will carry around memories of the quake and its aftermath forever, for better or worse. Christchurch offers us an impressive story of community resilience. Their recovery has been long and messy and even a little bit beautiful—ours will be too.

For the full version of Gradiva’s article, including photos, go to: https://medium.com/@purrgirl/
BERKELEY BE READY BUSINESS GOES TO NAPA

By Sarah Jones

To learn more about what problems arise for businesses after a disaster, several CERT volunteers visited the city of Napa twice in August 2015. The first trip toured downtown sites that had been affected by the August 24, 2014 earthquake. A year later there is still visible evidence of major damage to privately- and publicly-owned buildings. Other damage done just by water, such as broken pipes and overhead sprinkler systems, is less visible.

We visited with three small business owners who told us about their struggles to open, or reopen, their businesses after the quake:

1. A damaged brick and mortar store was helped by its online business until the store was repaired.

2. A business owner’s career background in finance was very helpful when trying to get loans to reopen her business.

3. Creative advertising had to be thought of by a coffee shop owner whose business was not damaged because the building had been retrofitted. Unfortunately his shop is located in the middle of a block where the buildings on either side of his are seriously damaged or destroyed and the street remains barricaded.

And we learned that additional problems exist for owners of historic buildings. Unlike Europe, in the United States private owners are responsible for repairing historic buildings. Owners of historic buildings may not have the money to do the repair and/or repairs may no longer be possible because the skilled workers needed are no longer available. These problems often prevent or delay the repair of historic buildings.

On our second visit in August, we heard the FEMA reports on chimneys, cripple walls, and other damage to buildings and homes as a result of the quake. These reports were targeted to engineers and contractors and are now available in printed form from FEMA.

http://www.fema.gov/media-library/resources-documents

Please read the article by Roger Sharpe on page 4 of this newsletter for more information.

Berkeley BRB recommends that businesses take steps before a disaster to help with cash flow and getting loans after. For instance: set up a line of credit, improve your FICO score, and know what your business insurance really covers, and have savings separated from the business.

Another tool for business owners is Townsquared, a social media company that manages a mailing list for small businesses meant to help businesses learn from each other.

Join us. We will be looking at business disaster planning software, talking to groups in Marin, and meeting with Business Organizations in Berkeley. Contact Sarah Jones at sarah@socrates.berkeley.edu

“CERT volunteers started Be Ready Business (BRB) to do more than just hand a pamphlet or piece of paper to Berkeley businesses. We want to help them be more prepared for emergencies like fire, flood, and earthquakes. We know that businesses, especially small businesses, focus on the bottom line. We believe there are cost-benefit steps that businesses can take ahead of an emergency that will help them survive the event.”

Sarah Jones
MASONRY CHIMNEYS AFTER A SHAKE

By Roger Sharpe

During earthquakes masonry fireplace chimneys in wood frame dwellings are extremely vulnerable to damage. In the 2014 South Napa Earthquake, FEMA assessment teams identified and observed over 100 damaged masonry chimneys.

This article is intended to provide information that will help homeowners repair earthquake damaged chimneys. Much of the information in this article comes from a FEMA advisory document titled, “South Napa Earthquake Recovery Advisory: Repair of Earthquake-Damaged Masonry Fireplace Chimneys,” FEMA document P-1024/RA1/June 2015. For additional and more detailed information on this subject contact the FEMA Distribution Center at 1-800 480-2520 or e-mail FEMA-PublicationsWarehouse@fema.dhs.gov

With damaged chimneys, safety and cosmetic issues may arise separately or together. Loose, falling, or displaced bricks, visible cracks in the fireplace or chimney, or any noticeable movement of the chimney are both safety and cosmetic issues that need to be addressed. However there can be damage not visible from the exterior or inside the house, such as: damage to the chimney liner or firebox; damage to the chimney at the roofline; loose bricks inside the chimney; or separation of the chimney from the structure. These are hazards and will need to be investigated and mitigated. Owners should consult with their local building department regarding applicable building code requirements. The building department may have a list of structural engineers and contractors who are familiar with this type of work. The department may also have information and details on applicable repairs and strengthening of chimneys. NB: Permits are required when repairing damaged chimneys.

FEMA noted that damaged masonry chimneys, reconstructed to match only pre-earthquake conditions, would remain vulnerable to damage in future earthquakes. This was seen in the South Napa Earthquake. Because of this, if damage exists to a masonry chimney I highly recommend that you do not repair it back to its original pre-earthquake condition. Instead repair and reconstruct it by following FEMA recommendations for the reconstruction of earthquake damaged masonry chimneys.

The FEMA document mainly addresses the repair of earthquake-damaged chimneys but much of the information can be used to help strengthen existing chimneys and to mitigate many of the hazards associated with older, undamaged masonry chimneys. To help identify and assess vulnerable masonry chimneys, a licensed structural engineer or licensed contractor, familiar with masonry chimney construction and repair, and knowledgeable of the FEMA document, can be consulted.

The California Earthquake Authority (CEA) has a list of contractors who have completed FEMA training for seismic retrofit of single-family houses. This list can be found on the CEA website at earthquakebracebolt.com/. Not all contractors will be experienced with masonry chimney repair so owners will want to discuss this with the contractors.

About the author:

Roger Sharpe, P.E., has over 40 years experience working in the public sector, developing and enforcing building code regulations. He is a registered Disaster Service Worker under the California Emergency Management Agency Safety Assessment Program. He also has helped develop seismic retrofit regulations for wood frame single-family dwellings.
JOIN ME! VOLUNTEER ROLE-PLAYING IN MASS CASUALTY INCIDENT ENACTMENTS

By Christine Schwartz

Planned, multi-agency/professional/multi-discipline full-scale emergency enactments give first responders a chance to practice and hone their skills in real-time scenarios. Volunteer role-players are crucial to their success.

“The importance of role players during Tactical Medicine training cannot be understated. These dedicated hardworking individuals greatly enhance the level of training the students receive.”

Lawrence E Heiskell, MD, FACEP, FAAFP
Founder and Director, International School of Tactical Medicine, Rancho Mirage, California

My interest began at UCB in my first Safety Class. After, my family and I got involved with Berkeley and Alameda County CERT classes. Later we took Police and Sheriff Citizen Academy classes and now I go on Police and Sheriff ride-alongs and Dispatch sit-alongs. I continue to attend safety workshops and seminars (e.g., El Nino). I started taking photographs and participating in volunteer role-playing for various Mass Casualty Incident Enactments: Earthquakes, Fires, Airport Incidents, Active Shooter and BART Drills, Ferry and Water Rescue, ISTM (International School of Tactical Medicine), and Urban Shield.

URBAN SHIELD: unique among enactments, is a training ground for new and seasoned responders but it is also a competition of teams (local, regional, national, and sometimes international) in the disciplines of SWAT, EOD, Hazmat, Maritime, and USAR. For example, in 2015, under SWAT, SAC PD placed 1st and Oakland PD placed 2nd. EMS teams also participate but not yet competitively. Urban Shield scenarios run simultaneously and continuously for over 48 hours. Volunteer role players work 12-hour shifts.

Participating as a role-player provides instant benefits. It’s one thing to prepare to respond by taking CERT Classes; it’s another to witness first responders put their professional skills into practice on a grand scale. Volunteer role-players have the rare opportunity to witness the outcomes and see how it’s all done.

During scenarios, I am specifically interested to learn:

- What are reasonable response times?
- What can be improved?
- Why and how role players died/lived?
- What were the different strategies used to effectively treat injured role players and avoid further injuries?
- What are the different care plans, tools, and techniques used, and why?
- What was the communication like between Law Enforcement and Medical Responders?
- Did Law Enforcement and Medical Responders work effectively together? Why/Why not?

Each year I have a blast. Roles for various scenarios include: bad guy, injured or dead casualty, non-injured bystander, or worried well. Some role players are fully moulaged. Better than Halloween! Join me! It’s fun and it’s a service to first responders.

Moulaged means make-up is put on your person to simulate an injury. Injuries look super-real to make for a more realistic emergency experience.

One time a paramedic informed me that he had a patient that presented symptoms like mine when I role-played as a person with a gunshot wound to the leg! He said he knew exactly what to do for this patient because he had just gone through that very scenario. Practice and knowledge put to work = a job well done! Our role-playing really helps our Law Enforcement and First Responders a great deal! I do believe that they remember us, what occurred, and they take this experience with them wherever they go, as I do!

To volunteer for Urban Shield 2016, go to https://www.urbanshield.org and click on volunteer registration. This year’s exercise begins Saturday, September 10, 2016, and ends on Monday, September 12, 2016. See upcoming Eventbrite announcements for more information and other volunteer opportunities.
WHITE FACES, RED EYES, BLUE LIPS
By Victoria Legg

It is 3:15 on a chilly, dark, Sunday morning. I pet the dog, pour a cup of coffee, pull on boots, and head down to North Berkeley BART. I stand with a few others in the dark, divining which, if any, of the black-suited firefighters I recognize. I’m happy to find one I know and give her a hug before descending the staircase into the bowels of BART.

Along with a dozen others, I enter a middle car and wait my turn for a makeover: white face, red eyes, blue lips. We give each other high fives as the train pulls out of the station. One passenger is the mom of one of the firefighters; another came all the way from San Francisco just to take this ride. Three of us are regular attendees of the monthly CERT Volunteer meetings. I adopt one as my disaster simulator buddy and she adopts me.

The train stops somewhere between North Berkeley and downtown. We hear an announcement that we are not to panic but to walk to the back of the train where the exhaust fans are. Two of us are alone in a car; we look at each other and start giggling before running up and down the empty aisle. We don’t know where the back of the train is but we go through the doors into the next car anyway. No one is around so we hang out and chat about bits of nothing until our attention shifts to someone walking in our direction. He says, “Follow me to the back of the train” and, like puppies chasing after Mother, we follow while yelling, “Feeling sick and how in the heck do we get off this train?” I have a scarf wrapped around my nose and mouth. The scenario is a tunnel fire. We imagine the cars are hazy with smoke, and I keep coughing - and laughing. My partner acts like she is stressed out. She wants answers she does not get. We stay close to the man because he’s carrying a radio and when it crackles, we yell, “HELP!”

At the back of the train we meet up with one of BART’s safety officers and a firefighter known for his outstanding ICS skills. I am envious of those skills and tell him so. He smiles and we talk shop for a while. Finally, more white faced, red eyed, blue-lipped passengers enter the car and the safety officer and firefighter disappear. OMG, we are alone! Again!

We run around the car, banging on doors and windows. We want out and hope someone hears us. Eventually we see a bouncy light and then a few hats so we press our faces to the window and bang and shriek. They walk right by and we bang and yell even louder. After a time the doors open and a hand is extended.

I don’t know about you but I read the evacuation directions near the doors on the BART train. I’ve often wondered what it would be like to have to step out of the car in the dark and not touch one of the paddles. This time there is a friendly face telling me he’s got me and takes firm hold of my arm but I don’t want to step into the inky void. I take a deep breath and drop down. Another firefighter walks me to a waiting BART train car a short distance away.

Passengers are sitting quietly; firefighters are methodically evaluating everyone in the car. My partner starts in, giving them a hard time for taking too long to rescue us. I chime in, telling them they should have gotten there sooner, gotten us out earlier, and treated us already. Everyone laughs when one of the men in black recognizes my partner from a CERT academy class he taught and then another firefighter tells us we always had the option to pull the emergency lever to open the doors.

It’s been eight years since the last emergency training exercise in the tunnels of BART and this is the first of three. One firefighter tells me he was unnerved when he first saw our very white faces, our very red eyes, and our very blue lips pressed against the window. I’m certain by the third exercise he will have mastered his own visceral response. I practice in hopes of gaining control over my initial response to the unexpected. If something happens and the altered environment is not completely unfamiliar to me, it will take less time for me to respond appropriately to my surroundings. Role-playing brings up feelings of anxiety, even mild panic, and I expect these feelings will be magnified many-fold in a real situation. If I can control these visceral feelings, I just might be of genuine help to others. This is my goal each time I get up in the dark to meet the first responders in black.