Southern Californians are generally aware of our state’s earthquake risk, but do people truly understand their own risk? No. Part of the problem is because we often think “all earthquakes are alike,” “the last one wasn’t that bad, therefore I don’t need to do anything different,” or “I’ll just pick up the pieces later.” These are false assumptions, and dangerous. Nowhere in Southern California is safe from harm to people and property. Shift does happen.

These earthquakes can cause major property damage to your home and contents, which can lead to serious injuries or even death for occupants. This is frightening, but true. By doing nothing about your home or belongings before an earthquake, it resigns you to become a disaster victim, no longer in control. In the 1994 Northridge earthquake, over 9,000 people were seriously injured, and 33 people were killed (sometimes this number is reported as 57, which includes other deaths such as heart attacks that may have happened anyway). According to a UCLA study, 55% of the injuries were minor (cuts, bruises, and sprains) caused by falling objects, pictures, lights, broken glass, etc. Only 1% of injuries were caused by building damage. 22 of the 33 deaths were in buildings, with 16 in one building that collapsed. A few of the deaths were caused by falling furniture or objects. Sadly, many of these deaths and injuries could have been prevented through actions taken before the earthquake.

So while you can’t control how the earthquake will shake you, the good news is that you can change how it may harm you by acting now to “Secure Your Space”. Your “Space” can be broken down into two areas: buildings and stuff. Both areas have the potential to cause great harm and damage, but the solutions are different.

For instance, “Securing Your Space” refers to buildings, and the need to retrofit potential weaknesses in the structure of your home or business. It can also refer to those elements that are not part of the structural floor/ceiling/walls but are considered a part of the building, for instance, electrical systems or mechanical systems such as heating, water, and so forth. If your building is an older single family home, it more than likely it is not reinforced to withstand significant earthquake shaking. These houses are vulnerable due to a variety of issues (ie. the wood frame is not bolted to the concrete foundation, poor foundation, and/or cripple walls are unreinforced.)

Other vulnerable structures include those built on post-in-pier or unreinforced masonry foundations, homes built on steep slopes, those with unreinforced masonry walls, or rooms built over existing garages. Additional poor-performers include concrete tilt-up
construction, mostly used by businesses, but also mobile homes, and those with "soft stories" such as tuck-under parking on the first floor. While we know these buildings are vulnerable, there are ways to earthquake strengthen them.

Another problem is that the majority of injuries in an earthquake are caused by contents within buildings becoming airborne or toppling over. So "Secure Your Space" also includes securing your stuff. Falling objects can injure or pin you, your loved ones, friends, or customers. Damage to stuff in your home or business can also be traumatizing and a devastating financial loss. Business can be interrupted when needed equipment is damaged. “Secure Your Space” is the solution by strapping top-heavy furniture and appliances to walls, adding latches to kitchen cabinets, and securing TVs and other heavy objects that can topple and cause serious injuries.

What other "stuff" should you secure? This can include bookshelves, windows, televisions, computers, water heaters, lights, dishes, breakables, paintings, office equipment, file cabinets, and ventilation ducts, to name a few. In some cases, objects can be replaced with a more secure substitute, reducing or eliminating a hazard. For example, new light fixtures might be considered in place of securing old heavier ones. Other hazards can be avoided by relocating, removing, or taking cover from them.

Straps, latches, Velcro™, brackets, earthquake wax, earthquake putty, wire, and bolts are some of the ways to secure a wide range of objects to avoid loss and damage during an earthquake. Most of these tools are available at your local hardware store. But begin by relocating an object so that it is braced and poses no threat to injuring anyone. Objects should also be relocated to avoid blocking exits if they fall.

The readiness actions of "Secure Your Space" taken before the next earthquake are designed to reduce your risk of injury and financial loss. When an earthquake does occur, you should still Drop, Cover, and Hold on immediately to protect yourself from anything that is not secured. Face away from windows or mirrors to protect your face from flying glass.

You will be largely on your own following a catastrophic earthquake, so you need to survive the event as uninjured as possible. “Secure Your Space” to address the hazards described above that may injure people at work and home, and cause serious financial impacts to you and your family.

For more information, visit www.daretoprepare.org

Brought to you by the Earthquake Country Alliance (ECA), a public-private partnership of leading earthquake professionals, emergency managers, elected officials, business and community leaders, and others.