



# KILLER ON THE LOOSE

## How to reduce the risk of injuries and damage caused by earthquakes

*Most injuries during an earthquake are caused by falling objects. In the United States, over 90% of earthquake damage is to building contents. By securing contents in our homes and offices now, damages will be far less and many injuries will be prevented.*

### STEP 1 – Identify the Hazards:

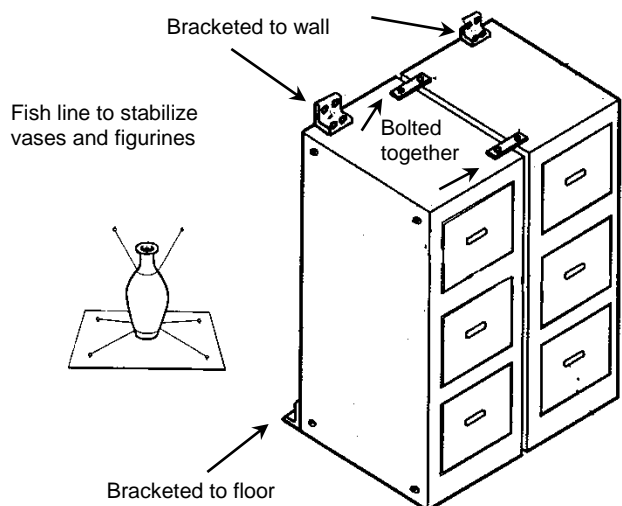
The first step in reducing the risk of damages and injuries is to do a hazard assessment. Complete a survey of your home and other primary environments by looking for the potential hazards that are listed below.

#### At home:

- Are there heavy and/or tall items in your home that may move or fall over during an earthquake?
  - If these items moved or fell, would they block exit routes out of a room or out of your house?
  - Can these items be secured to structural support (i.e., wall studs)?
- Are hanging plants and light fixtures secured to prevent them from swinging free, breaking against walls or furniture, or breaking windows?
- Are gas appliances securely fastened in place (e.g., water heater and clothes dryer) so they won't pull the gas line connections apart?
- Are wall-mounted objects (clocks, pictures, mirrors, etc.) secured against falling?
- Are items on shelves and in display cabinets secured to prevent them from falling out?
- Are televisions, computers, and other electronics secured in place?
- Is your house securely fastened to its foundation?

#### At work:

- Are items on shelves and in cabinets secured to prevent them from falling out?
- Are there items that no longer serve a useful function that can be removed?
- Are there incompatible chemicals stored together that should be moved to prevent mixing if the containers break?
- Are free-standing file cabinets, bookcases, vending machines, and other tall pieces of furniture secured to structural support?
- Are heavy or breakable items stored on top of bookcases or cabinets?

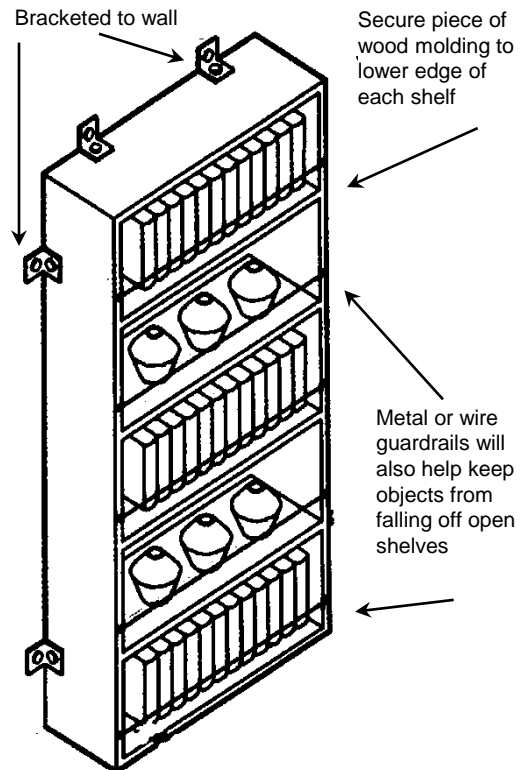


## STEP 2 – Make a Plan:

Now that you've identified the hazards, make a plan to correct them. Some problems can be fixed at little or no cost e.g. securing bookcases to walls, closed hooks for pictures and mirrors. Larger problems will require a retrofit, remodel or incremental upgrades as finances allow. When purchasing furnishings, look for strong latches on cabinet drawers and shorter bookcases that don't require securing to the wall to be safe.

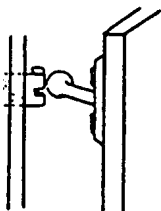
## STEP 3 – Roll up your Sleeves:

- Bolt heavy, tall, upright furniture to wall studs
- Lock or remove rollers on beds, furniture, and appliances
- Secure hanging plants and light fixtures with guy wires to prevent swinging into walls or windows and breaking
- Locate beds away from windows and heavy wall-mounted objects
- Secure kitchen and bathroom cabinets with latches
- Secure items on shelves with quake mats, Velcro™, earthquake putty, low shelf barrier, or other restraining devices
- Store heavy and/or breakable items on lower shelves
- Strap water heater and all gas appliances to wall studs
- Use flexible gas connections on gas appliances
- Check chimney for loose bricks and repair as needed
- Check foundation for cracks and repair as needed
- Bolt home to foundation to prevent shifting during an earthquake
- Secure mirrors and pictures to the wall
- For additional information on nonstructural mitigation activities contact your local Emergency Management Office

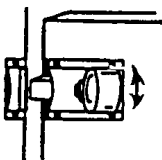


### Types of positive catching latches for cabinets

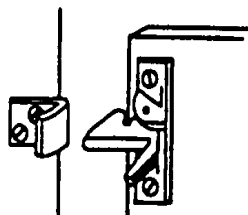
Child proof (Out of sight, inexpensive and easy to install)



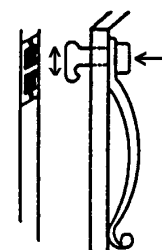
Decorative (Turn knob to open)



Decorative (Pull back handle to open)



Decorative (Press knob to open)



Hook and Eye (Suitable for Garage Cabinets)



### Mirrors and Pictures

Closed hook/loop

mirror/  
picture

Sheetrock

2"X4" wall stud

