



Easy fixes for 21 everyday **HOME DANGERS**

HOW MANY POTENTIALLY LIFE-THREATENING HAZARDS DO YOU HAVE AROUND YOUR HOUSE? USE OUR CHECKLIST NOW!

An estimated 28,200 deaths each year are a result of accidents that happen at home. OK, we know you've heard scary stats like that before, so you're careful. You've put in smoke alarms and locked away chemicals behind childproof latches. But your house might still have plenty of danger spots. Lots of everyday items could put you and your family at risk. To prove our point, our own safety guru, Donald Mays, went through the home of staffer Ina Gozenpud Matlis, who lives with her husband, Gus, and three children, Zach, 8, Jonah, 7, and Marc 3, on Long Island, New York. The Matlises

thought they were on top of it. In addition to installing smoke and carbon-monoxide alarms, they made sure their clothes dryer was properly vented (dryer fires kill about 15 people annually). Then our expert arrived. Four hours and 21 safety infractions later, they felt a lot less confident. The good news: Most of the mistakes are easily fixable. Check them out on the next few pages and see if you can spot similar risks at your house. Then see the tips and tools that can help you do your own home-safety check. It's really simple and, like the Matlis family, you'll sleep a lot easier after you've done it.

Our expert



The family



Donald Mays (left) found lots of ways to create safe surroundings for the Matlis family (left to right: Zach, Ina, Marc, Gus, and Jonah).

PHOTO ILLUSTRATION: STEPHEN WEBSTER; PORTRAITS: MICHAEL SMITH

The top home hazards

AFTER A FEW HOURS AT THE MATLIS HOME, OUR EXPERT FOUND SERIOUS SAFETY PROBLEMS. SEE HOW MANY YOU CAN SPOT IN YOUR OWN HOME.

TRIPPING TRAPS

Falls on stairs, landings, and uneven floors cause more than 2 million injuries a year.

1 Missing hand rails

Most of the stairways in the Matlis home have only partial railings. To prevent falls, there should be hand rails along the entire set of stairs.

THE FIX Install a secure hand rail all the way up the stairway. Prefab rails are relatively cheap, and you can buy them at local home centers.



Uneven steps can cause nasty stumbles.

2 Uneven steps

In the family's home, the last step on this stairway is 2 inches shorter than the rest, which is a stumbling hazard.

THE FIX Sorry, but the only way to fix this problem is pricey. The stairs should be replaced so each step is the same height.

3 Uneven floors

The floor of the entryway to the kids' playroom from the laundry room is uneven, which could cause a fall.

THE FIX Leveling the floor is the only way to solve the problem. A cheap temporary fix is to stick yellow caution tape on the floor to prevent trips.

4 The wrong lighting

Stairways should be well-lit at the top and bottom. Though there is a chandelier in an area leading to three sets of stairs in the house, it was hung too low for our safety pro or any other 6-foot-plus visitors to clear.

THE FIX Shorten the chain or replace the chandelier with a ceiling fixture.



It's easy for someone to get bonked on the head by low-hanging lights.

BATHROOM PERILS

More than 300,000 injuries a year happen in the bathroom.

5 Slippery showers and tubs

Though the Matlises have skidproof rubber mats in both the tub and

shower to prevent falls, they don't have grab bars. The bars are a good idea for any family, especially if grandparents visit often.

THE FIX Install grab bars in the tub and shower.

6 Too-hot tap water

Hot tap water causes roughly 3,800 injuries and 34 deaths a year. The majority of those accidents happen to kids under 5 and to the elderly.

A temperature check of the tub, which all three kids and visiting grandparents use, found that the water was hotter than the recommended 120° F. **THE FIX** Turn down the water-heater thermostat. This will also save energy. If you have kids, whose skin burns more easily than an adult's, install an anti-scald valve (around \$100 and up) that shuts off the water if it gets too hot.



Water hot enough to burn skin is an easy problem to fix.

7 The wrong outlets

Outlets with a ground-fault circuit interrupter (GFCI) are essential in bathrooms, kitchens, and anywhere near water. If you have GFCI-protected outlets and accidentally drop your curling iron in a sink full of water, the circuit will be cut, preventing possible electrocution. GFCIs could prevent two-thirds of the estimated 160 electrocutions and thousands of burns and electric shocks that occur in homes each year. The Matlis bathroom was missing those outlets.

THE FIX Get an electrician to retrofit outlets with GFCI protection.

CRUSHING DANGER

Automatic garage doors can pin down a child. Twenty-three accidents resulting in death or injury to kids under 15 were reported from 1996 to 2003.

8 Faulty garage-door opener

Automatic door openers should have an electric eye that causes a closing door to reverse if an object

gets in its path. The Matlises' garage door lacks this safety feature. The door failed a reversal test when we put a block of wood under it (see the box on page 41).

THE FIX Replace the garage-door opener with a new, safer one and make sure it's properly adjusted.

FIRE RISKS

Fires and burns are the third leading cause of home deaths after poisoning and falls. They can be prevented by making sure all floors have working smoke alarms and having a home-escape plan.

9 Missing smoke alarm

Smoke detectors should be installed on every floor of a house and especially in bedrooms. Though the rest of the house is covered, the Matlises haven't gotten around to installing an alarm on the third floor, where Gus and Ina have their office.

THE FIX Install a dual sensor (photoelectronic and ionization) alarm ASAP. Test alarm batteries every month and replace them twice a year when you change the clocks.

10 Exposed electrical wires

Someone could touch them and be electrocuted.

THE FIX This dangling wire in the garage should be housed in an electrical box and covered with a plate by an electrician.



These exposed wires were a real shocker.

11 Plugged-in cooking appliances

In homes with kids, small kitchen appliances should be unplugged when not in use so curious toddlers can't turn them on. Be especially sure to unplug a toaster or toaster-oven because some models have been known to turn on spontaneously or not turn off at the end of a cycle, which can pose a fire risk.

THE FIX Unplug anything after use, including coffeemakers, irons, and electric heaters. And never leave things on when you're not home—yes, including slow cookers, washers, dryers, and dishwashers.

12 Locked dead bolt on the inside of the door

In a home fire, you might have only a few minutes to get everyone outside safely, which might be tough if you can't find the key to the door.

THE FIX Keep the key in the lock at all times or very close by, where it can be found quickly. Or replace the lock.

Hidden health risks

Lead, radon, and carbon monoxide are invisible dangers that might be lurking in your house. Lead-based paint was outlawed in the U.S. in 1978, but if your home was built before then, it probably has some. Young children are among those at greatest risk of lead poisoning, which can cause brain damage and diminished mental and physical development. Radon, a radioactive gas naturally found in the soil and rock beneath homes, is the second leading cause of lung cancer after smoking. It causes an estimated 21,000 deaths a year. One of every 15 homes in the U.S. has elevated levels, according to the Environmental Protection Agency. Professional inspections cost hundreds of dollars. A cheaper way to go is testing kits sold at most home centers. We tested lead and radon kits to see which ones were the most reliable. We also tested carbon-monoxide monitors. Here are our top picks.

TOP LEAD-TEST KITS FOR PAINT

- Abotex Lead Inspector Lead Test Kit, \$13
- First Alert Premium Lead Test Kit LTI, \$20
- Homax LeadCheck Test Kit, \$8
- SKC LeadCheck Instant Sampling Test Kit, \$24

How they work The kits have one of two chemicals to detect lead by color change.

TIP Rhodizonate-based kits (Homax, SKC) can yield false positives on red or pink paint; sulfide-based kits (Abotex, First Alert) can yield false negatives or positives on dark paint. For more reliable results, we recommend using one of each type of kit. Also, follow instructions exactly and make sure that you expose and test every layer of paint down to the oldest.

TOP RADON KITS

- Accustar Alpha Track Test Kit AT 100, \$28
- RTCA Charcoal Canister, \$20

How they work Long-term kits take samples over 90 days using strips of film or plastic with radon-detecting alpha particles. Short-term kits take samples for two to seven days using activated charcoal.

TIP Long-term kits (Accustar) are more accurate. Radon levels can vary significantly from day to day, so samples taken for 90 days give a better reading of usual levels. The RTCA was the only short-term kit accurate enough for us to recommend, but confirm results (less than 4 picocuries per liter is good) with a long-term test.

TOP CARBON-MONOXIDE MONITOR

- American Sensors AC Digital & Battery Backup CO920, \$100

How it works It detects colorless and odorless CO gas, which can be deadly, and alerts you with an alarm.



This swing set looks nice, but what's missing could cause a deadly fall.

RISKS FOR KIDS

Don't assume play equipment is safe just because it's made for kids. We found some risky playthings in the Matlises' backyard and dangers inside too.

13 Inflatable pool



Everyone into the pool! But NOT this one. Inflatables are a no-no.

Because the soft, flexible sides can collapse if leaned on, a child can easily fall in and drown. Even the cover poses a drowning hazard when filled with rain water, as this one was; children have become entangled and drowned in such covers.

THE FIX Inflatable pools are a serious hazard for small children, so don't buy them. The family should replace this one with a safer, hard-sided, above-ground pool and also get a pool alarm. In our tests, only two of six alarms worked well. They were the Poolguard PGRM-AG, \$140, for above-ground pools, and the Poolguard PGRM-2, \$225, for in-ground pools.

14 Trampoline

Many pediatricians consider trampolines too dangerous and want them banned. They are on our list of products not to buy your kids. The Consumer Product Safety Commission estimates that in 2007 there were 107,435 injuries linked to trampolines that required emergency-room visits.

THE FIX Because the Matlis kids love their trampoline, getting rid of it was out of the question. But Ina and Gus agreed to replace parts that had deteriorated. The good news is that the trampoline in the

backyard is enclosed with a net to keep children from accidentally bouncing off. But kids should be supervised at all times when they're using the trampoline, the 3-year-old and other kids under 6 should never use it, and only one child at a time should be allowed. If more than one child is jumping they can crash into each other and be seriously injured.

15 Swing sets

Grass may seem nice and cushy, but it's not soft enough to buffer falls from this swing set or a spill from the overhead climbing bars, which present a serious injury risk.

THE FIX The Matlises should put some shock-absorbing ground cover—wood chips, mulch, or pea gravel—under that swing set. Fast. The ground cover should be at least 12 inches deep and extend 6 feet in all directions from the equipment. Older sets made of pressure-treated wood might contain arsenic that can leach out and should be sealed once a year.



Condemn it! That's all we have to say about this tree house.

16 Tree house

This is a disaster! It has lots of structural problems, including a makeshift rung made from a skinny stick on one of the ladders. The 3-year-old has already taken a nasty tumble from it.

THE FIX Tear it down now! And build a more secure one.

17 Tippy TVs and furniture.

Falling TV sets are a growing cause of childhood deaths and injuries.

THE FIX Any TV, VCR, or DVD player should be placed on a secure TV stand or on a shelf fastened to the wall—never on a dresser, as we found in the master bedroom, where kids could climb on opened drawers and cause the piece to tip. In addition, any furniture over 30 inches tall should be secured to the wall with anti-tip restraints.



Never put a TV on a dresser. It could tip over and crush a child.

18 Glass doors and tables

You probably know to put large stickers on sliding glass doors to keep children (adults too) from walking or

running into them. But glass tables, like the one found in the Matlises' living room, can break and cause cuts.

THE FIX Replace glass tables with nonglass ones or buy a table with tempered safety glass.

19 Overstuffed shelves

A pile of toys on a shelf could topple on a child's head when he tries to pull out the one he wants.

THE FIX If something would attract a little kid, don't store it near a stool or anything he could climb on that would encourage him to reach for it.



This bookshelf is not just a mess—it could topple over and kill a child.

20 Window blinds and drapery cords

Common household window treatments with cords can strangle a baby, and we found them on every window of the Matlis house, including those in the youngest child's room.

the toilet-paper roll test is the best way to ensure that you don't give your child a toy he could choke on. Also, keep older kids' toys out of the reach of young children.

THE FIX Cut looped cords in half to form two strings and wrap up loose ends beyond a child's reach. Other options are to roll up the cords and tie them with rubber bands or twist ties or to mount a hook high out of a child's reach to secure the excess cord.

21 Small toys

If a child is less than 3 years old, as Marc was when we visited the Matlises, any small balls or other toys can be a choking risk.

THE FIX Make sure any toys you give to small children are too big to fit through a toilet-paper tube. Anything that does fit could be a choking hazard. You can do a test with a store-bought choking tube, but

Do-it-yourself home-safety tool kit

Everything you need to do your own safety check is here. You can buy most of these items at a home center.



Ruler.

Measure all steps. They should be the same height. Check spaces between crib slats and deck rails to ensure that a child's head can't get stuck. They should be no more than 2 3/8 inches apart on cribs and 4 inches on deck rails.

Digital thermometer.

To test your tub and tap water, put the thermometer under running hot water; if it's over 120° F, turn down the water-heater thermostat. We used a digital meat thermometer, like the one from Polder, show above.

Toilet-paper tube.

If you have a child younger than 3 at home or one visits often, use an empty toilet-paper roll to test toys and small, kid-reachable items. Anything that fits through can be a choking hazard.

Electrical polarity tester.

Use this to test whether an electrical outlet is properly wired. Also use it to test ground-fault circuit interrupters. The testers are available online and at home centers for about \$10.

Block of wood.

Place a two-by-four block (get a scrap from a home center) under your garage door to make sure the electric opener will reverse itself in case an object (including a body part or tiny tot) is in harm's way.

Lead test kits.

If you're worried about lead-tainted toys or lead paint on walls or other surfaces in your home, do-it-yourself testing kits can quickly alert you to surfaces that harbor lead. See page 39 for our Smart Picks.

Radon test kits.

The only way to know whether your home harbors this invisible, radioactive gas is to test for it. For the most accurate measure, place the kit on the lowest occupied level of your home. See page 39 for our Smart Picks.