

# Erie County Disaster Preparedness Assessment

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## Acknowledgments

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# Erie County Disaster Preparedness: Methods

## Methods

### Overview

This report provides an overview of disaster preparedness-related data for Erie County residents who participated in a county-wide survey during 2011. The findings are based on self-administered surveys using a structured questionnaire. The Erie County Health Department and the Hospital Council of Northwest Ohio collected the data, guided the health assessment process and integrated sources of primary and secondary data into the report.

### Design

Erie County residents (n=587) participated in an online disaster preparedness survey using Survey Monkey and also a written paper survey. They were directed to take the survey by post cards that went home to Erie County households, the Erie County Health Department website, and marketing at the Wightman-Wieber Safety Celebration Fair.

### Instrument Development

National surveys such as the CDC's Behavioral Risk Surveillance System (BRFSS) and AT&T Disaster Preparedness Survey, along with local surveys such as the Maui Resident Survey on Disaster Preparedness and the Public Policy Institute of California Statewide Survey were used as a baseline for survey questions. The committee created additional questions to meet local data needs.

### Limitations

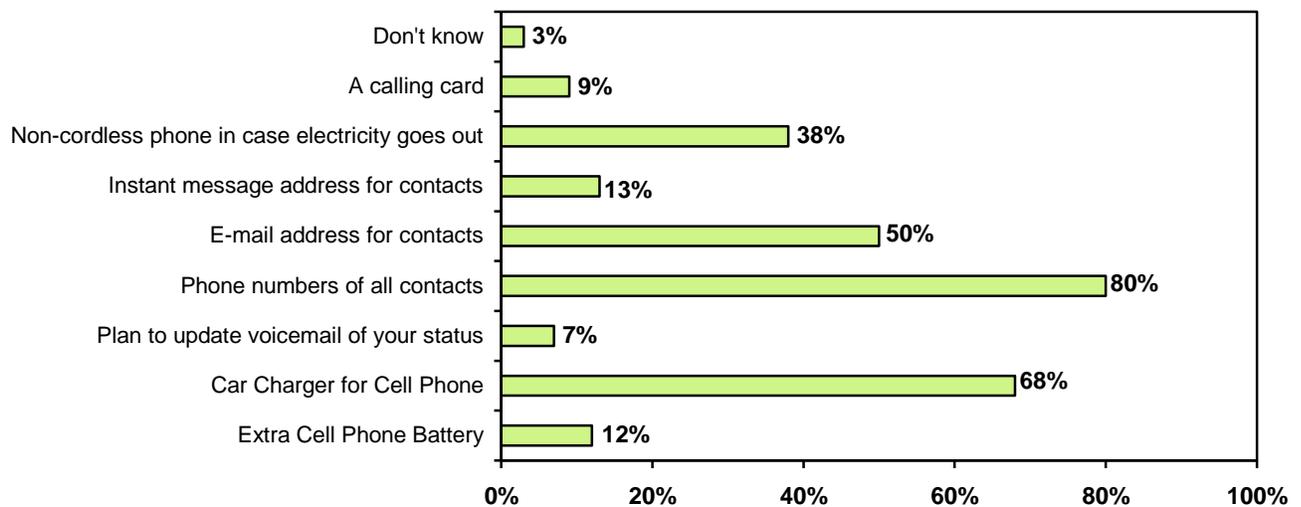
The results of this survey cannot be generalized to the entire Erie County, as a random sampling method was not used. Having a large sample size (n=587) allows for inferences to be made regarding the data outcomes. However, if any important difference existed between the respondents and the non-respondents regarding the questions asked, this would represent a threat to external validity of the results.

## Erie County Disaster Preparedness: Communication

### Communication

- ◆ 10% of Erie County residents reported having a written disaster evacuation plan for how their household will leave, in case of a large-scale disaster or emergency that requires evacuation.
- ◆ Erie County residents reported the following method or way of communicating with relatives and family in a large scale disaster or emergency: cell phone (90%), regular home phones (31%), email (30%), and two-way radios (5%).
- ◆ 4% reported they did not know how what would be their main method of communicating.
- ◆ Erie County residents reported the following ways of getting information from authorities in a large-scale disaster or emergency: radio (64%), television (64%), internet (38%), neighbors (26%), and print media, such as newspapers (14%). 4% did not know how they would get information from authorities.
- ◆ Nearly half (48%) of residents who took the survey felt somewhat confident that they would figure out a way to communicate with friends or family in the event of a disaster, even if phone lines and e-mail may not be available.
- ◆ 66% of those who took the survey felt that having backup communications and tactics are very necessary in the event of an emergency or natural disaster.

### Communications Supplies and Tactics That are Currently Used, Owned or Practiced



Erie County Disaster Preparedness Communication	Agree	Disagree	Don't know
You have practiced your emergency plan so that you will be ready to execute it when disaster strikes.	19%	74%	8%
You have identified shelters in your area where you can go should you be required to evacuate.	22%	66%	12%
You have a supply kit in your home, which includes things like food, water, a first aid kit, batteries, a flashlight, and other tools you may need in the event of a disaster.	42%	51%	8%
You have an emergency plan in place that you can follow in the event you should need to evacuate your work, home or school.	22%	70%	9%
You are informed about the types of potential disasters that could affect your area, and the actions you should take for each of these during an emergency.	34%	59%	13%

# Erie County Disaster Preparedness: Knowledge & Utilization

## Knowledge and Utilization

- ◆ 58% of the Erie County residents who completed the survey thought that their household would be somewhat prepared to handle a large-scale disaster or emergency. 31% reported their household is not prepared at all.
- ◆ 75% of those who completed the survey reported they would evacuate if public authorities announced a mandatory evacuation. 22% reported they did not know or was not sure.
- ◆ The following reasons were reported for why they might not evacuate if asked to do so: concern about leaving property behind (39%), concern about traffic jams and inability to get out (28%), concern about family safety (27%), concern about leaving pets (25%), concern about personal safety (21%), lack of trust in public officials (12%), lack of transportation (9%), and health problems (6%).
- ◆ 38% of those who took the survey reported that the reason why people may not follow the guidelines is because they do not have enough information to make a plan. 33% said that the costs of advanced planning and keeping supply kits are too high. 26% of those who took the survey reported that one of their biggest barriers was they had little or no time to follow through with the emergency preparedness guidelines. 6% said they did not follow the guidelines because they are unrealistic expectations of planning.
- ◆ When asked which types of organizations were most likely to influence your decision to prepare for a natural disaster, 77% said a severe weather or news information source, 32% said government official, 31% said news outlet, 17% said residents of the community and 17% said a non-profit organization.
- ◆ 55% of those who took the survey reported they only had some confidence in the state and local government in terms of their readiness to respond to disasters, such as a major tornado or flood in Erie County.
- ◆ Erie County households had the following disaster/emergency supplies: cell phone (93%), working flashlight and working batteries (88%), 3-day supply of prescription medications (78%), 3-day supply of non-perishable food for everyone who lives there (71%), working battery operated radio and working batteries (60%), and a 3-day supply of water for everyone who lives there (37%).
- ◆ 20% of those Erie County residents who took the survey indicated someone in their home had functional needs that would require additional assistance in the case of any emergency. The functional needs that were listed include the following:
  - Mobility impaired (9%)
  - Hearing impaired (5%)
  - Requires dialysis machine or other life-sustaining equipment (5%)
  - Special dietary needs (5%)
  - Access to transportation (5%)
  - Visually impaired (3%)
  - Intellectually disabled (1%)
  - Dementia (1%)

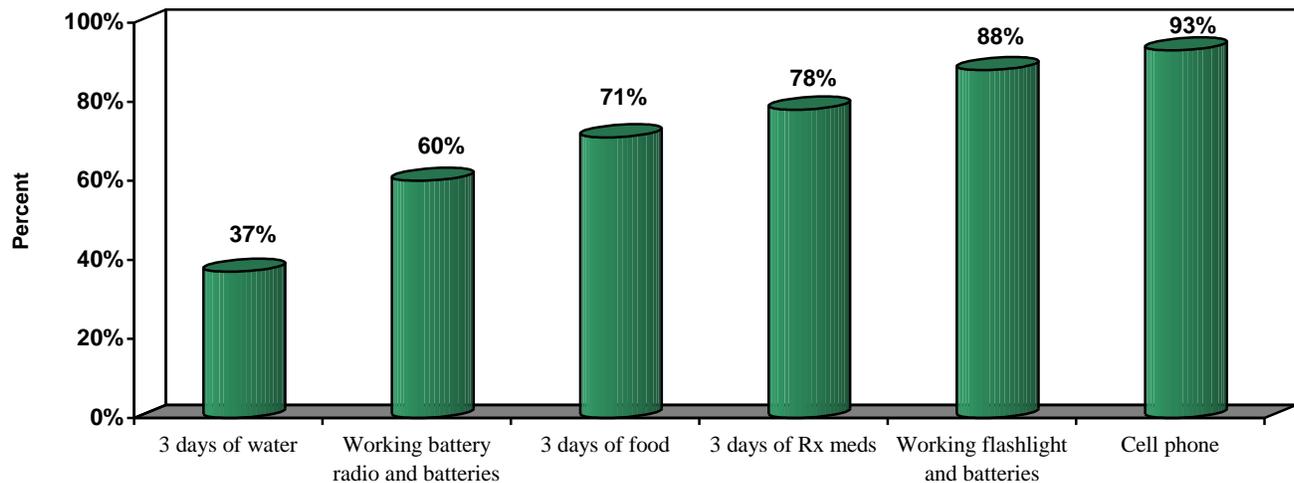
## Preparing Your Pets for Emergencies

- ❖ Have a pet emergency supply kit with 3 days of food and water, medicine and medical records, first aid kits, collar with ID tag, harness or leash, crate or pet carrier and litter box or newspaper for sanitation.
- ❖ If you have to evacuate and it is practical, take your pets with you.
- ❖ Plan with neighbors, friends or relatives to make sure that someone is available to care for or evacuate your pets if you are unable to do so.
- ❖ Talk with veterinarian about emergency planning.
- ❖ Gather contact information for emergency animal treatment.

*Source: Federal Emergency Management Agency (FEMA), Ready: Prepare. Plan. Stay Informed., Preparing Your Pets for Emergencies Makes Sense, Obtained from: <http://www.ready.gov/america/downloads/pets.pdf>*

# Erie County Disaster Preparedness: Knowledge & Utilization

## Disaster Preparedness Supplies in Household



### Recommended Items to Include in a Basic Emergency Supply Kit

- ❖ Water, one gallon of water per person per day for at least 3 days, for drinking and sanitation
- ❖ Food, at least a 3 day supply of non-perishable food
- ❖ Battery-power or hand crank radio and a NOAA Weather Radio with tone alert and extra batteries for both
- ❖ Flashlight and extra batteries
- ❖ First aid kit
- ❖ Whistle to signal for help
- ❖ Dust mask, to help filter contaminated air and plastic sheeting and duct tape to shelter-in-place
- ❖ Moist towelettes, garbage bags and plastic ties for personal sanitation
- ❖ Wrench or pliers to turn off utilities
- ❖ Can opener for food (if kit contains canned food)
- ❖ Local maps
- ❖ Cell phone with chargers

### Additional Items to Consider Adding

- ❖ Prescription medications and glasses
- ❖ Infant formula and diapers (if necessary)
- ❖ Important family documents such as copies of insurance policies, identification and bank account records in a waterproof, portable container
- ❖ Cash or traveler's checks
- ❖ Sleeping bag or warm blanket for each person
- ❖ Additional clothing including a long sleeved shirt, pants and sturdy shoes
- ❖ Household unscented chlorine bleach and medicine dropper
- ❖ Fire extinguisher
- ❖ Matches in a waterproof container
- ❖ Feminine supplies and personal hygiene items
- ❖ Mess kits, paper cups, plates and plastic utensils, paper towels
- ❖ Paper and pencil
- ❖ Books, games, puzzles or other activities for children

Source: Federal Emergency Management Agency (FEMA), Ready: Prepare. Plan. Stay Informed., Emergency Supply List, Obtained from: <http://www.ready.gov/america/downloads/checklist3.pdf>

# Erie County Disaster Preparedness: Hazards

## Hazards

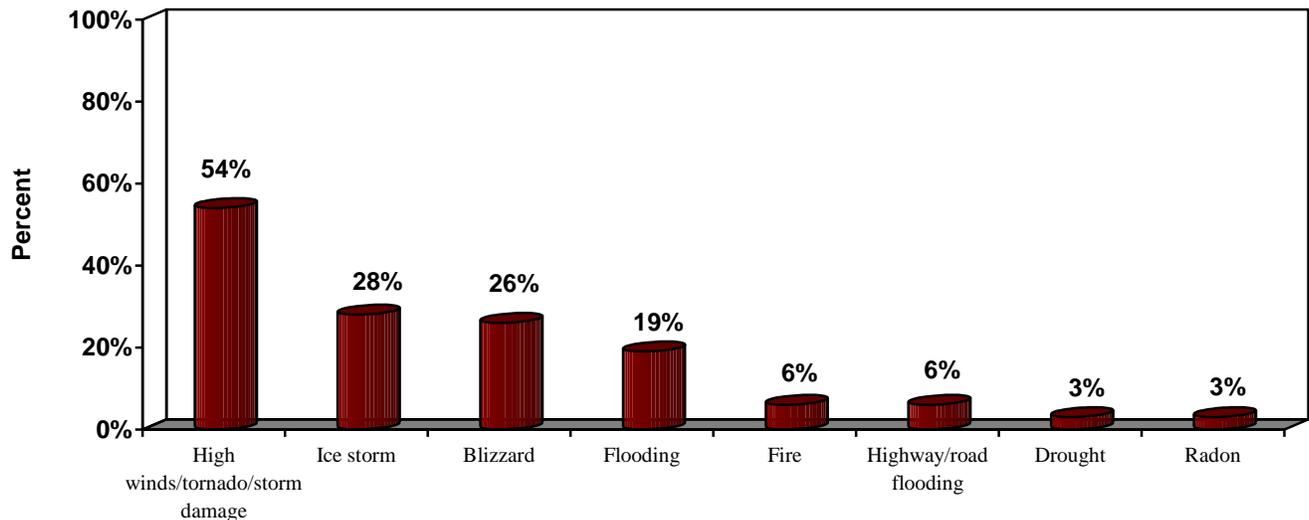
- ◆ 89% of the Erie County residents who took the survey were worried that high winds, tornadoes or storm damage may affect their family or property in the future.
- ◆ When asked what hazards the public needs to have more information about, the following were their responses: high winds, tornado, or storm damage (54%), blizzard (50%), ice storm (47%), radiation (45%), flooding (44%), highway/road flooding (37%), radon (33%), earthquake (32%), fire (27%), and drought (17%).
- ◆ In the event of a tornado, 62% would seek shelter in a basement. 28% would seek shelter in a bathroom and 21% in an interior room. 10% would find shelter in a crawl space. 6% would go to a neighbor's house, 6% would go to a ditch and 5% would go to a relative's house.

### Shelters for a Tornado Warning

- ❖ Storm cellars or basements work best
- ❖ If underground shelter is not possible or you are in a high-rise building, go into an interior room or hallway on lowest floor
- ❖ Stay away from windows, doors and outside walls.
- ❖ If shelter is not available, lie flat in a ditch or other low-lying area.
- ❖ Avoid vehicles, trailers, motor homes, under bridges or overpasses as they do not provide protection.

Source: Federal Emergency Management Agency (FEMA), Ready: Prepare. Plan. Stay Informed. Tornadoes, Obtained from:  
<http://www.ready.gov/america/beinformed/tornadoes.html>

### Natural Hazards that have Affected/Damaged Your Home or Property

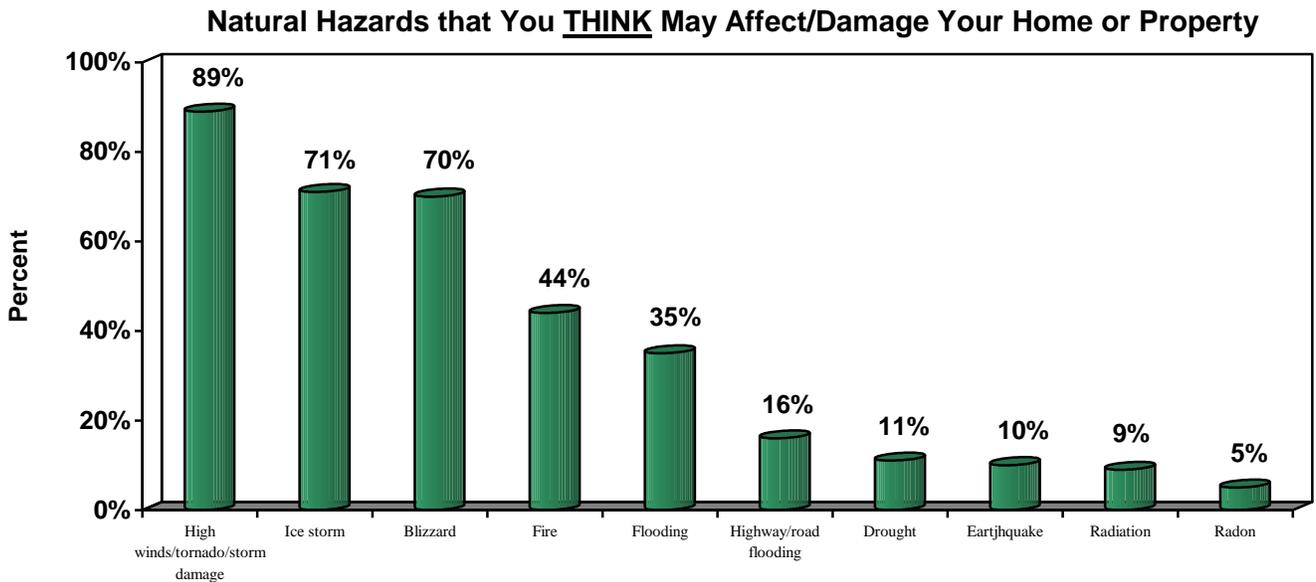


### Tornado Facts and Safety Tips

- ❖ Peak tornado season for Ohio is generally April through July.
- ❖ The most violent tornadoes have wind speeds of 250 MPH or more.
- ❖ The Ohio Committee for Severe Weather Awareness encourages Ohioans to DUCK!
  - D – Go DOWN to the lowest level
  - U – Get UNDER something
  - C – COVER your head
  - K – Keep in shelter until the storm has passed

Source: Ohio Committee for Severe Weather Awareness, Tornado Facts and Safety Tips, Obtained from:  
<http://www.weathersafety.ohio.gov/TornadoFacts.aspx>

## Erie County Disaster Preparedness: Hazards



### Flood Facts and Terms

- ❖ Flooding is the nation's most common and costly natural disaster.
- ❖ A flash flood warning is issued when there is a short duration of intense rain or rapid flooding of counties, communities, streams or urban areas.
- ❖ A flood watch can be issued for the potential of rapid flooding from either torrential downpours, dam breaks or ice jam breaks. Watches can be issued up to 12 hours prior to flood event.
- ❖ Flood insurance is not covered by homeowner or renters insurance policies.
- ❖ According to the National Flood Insurance Program (NFIP), a home is 4 times more likely to be damaged by flooding than by fire during the course of a 30-year mortgage.

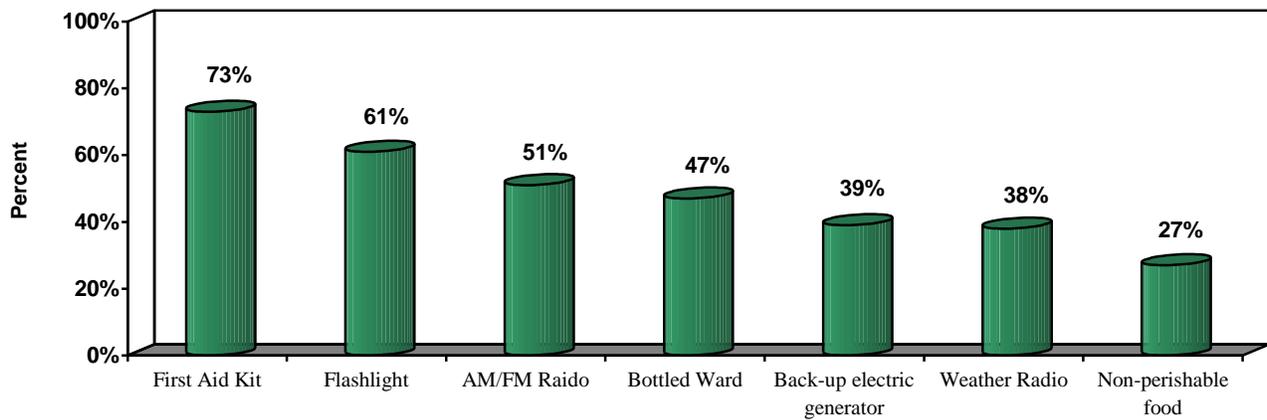
Source: ReadyOhio: Are you Ready for a Flood? Obtained from: <http://publicsafety.ohio.gov/NPM/ReadyForAFlood.stm>

# Erie County Disaster Preparedness: Business Preparedness

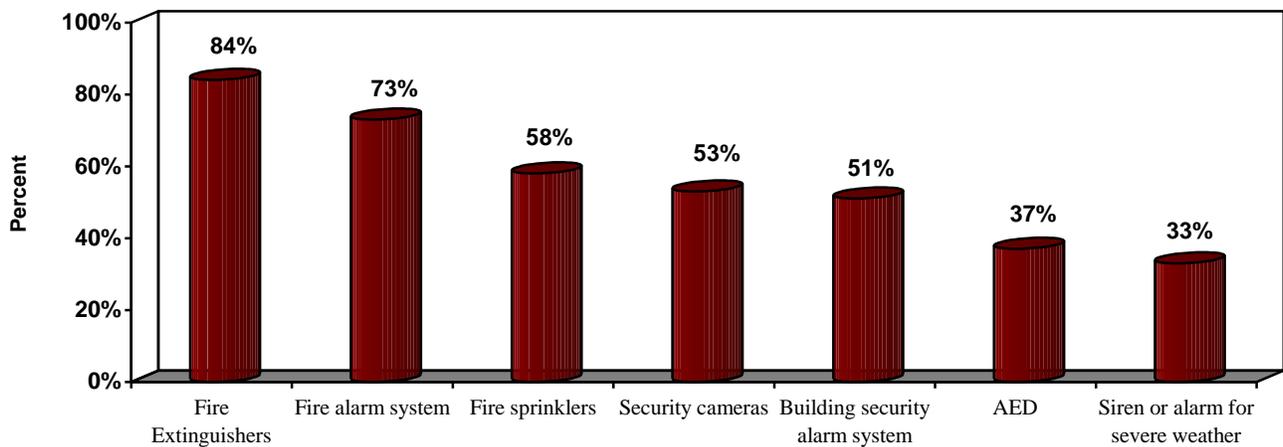
## Business Preparedness

- ◆ When asked what plans or procedures your business or company has completed, the following were their responses:
  - Evacuation or shelter in-place plan for fire, tornado, or severe storm (50%)
  - Communication plan or telephone calling tree to contact staff after hours (39%)
  - Facility security plan (33%)
  - Continuity of operations plan for operating the business during and after a disaster (27%)
  - Plan for reduced staff due to a natural disaster or pandemic (19%)
  - Cyber security plan (12%)
  - Signed agreement with the health department for dispensing medication and/or vaccines to your staff and family members during a public health emergency (10%)
- ◆ 28% of those who took the survey indicated that they did not know if any of these plans were in place at their place of employment.
- ◆ 5% of those who took the survey said that they did not know what safety features are in place at the business where they are employed.
- ◆ 63% of indicated they felt that it was extremely important for your company or place of business to have emergency plans developed.

**Disaster Preparedness Supplies at Business**

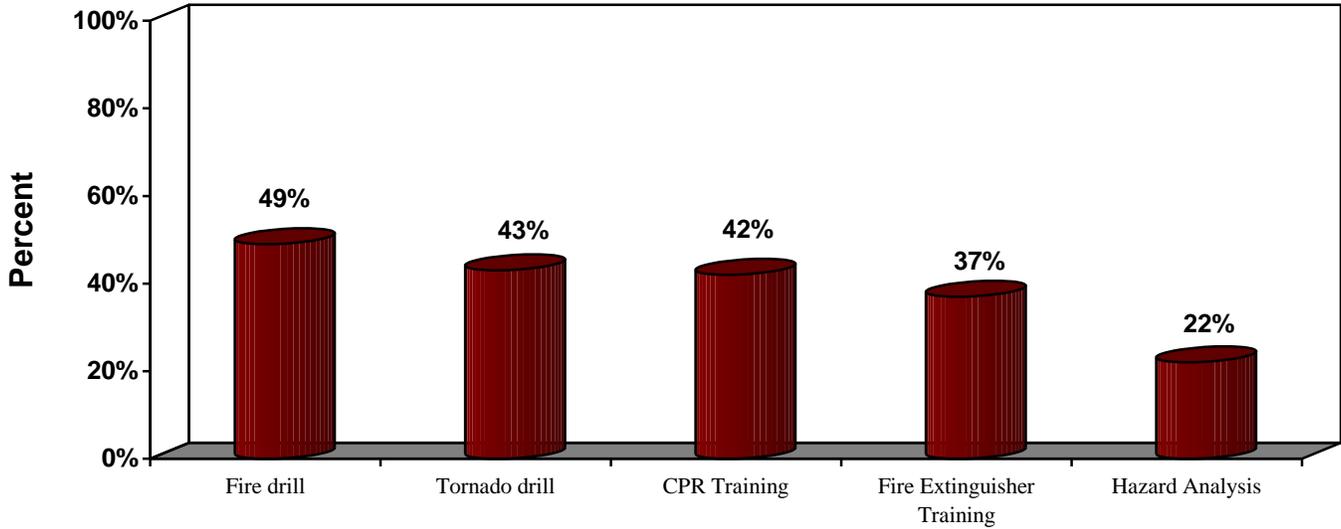


**Safety Features at Business Building**

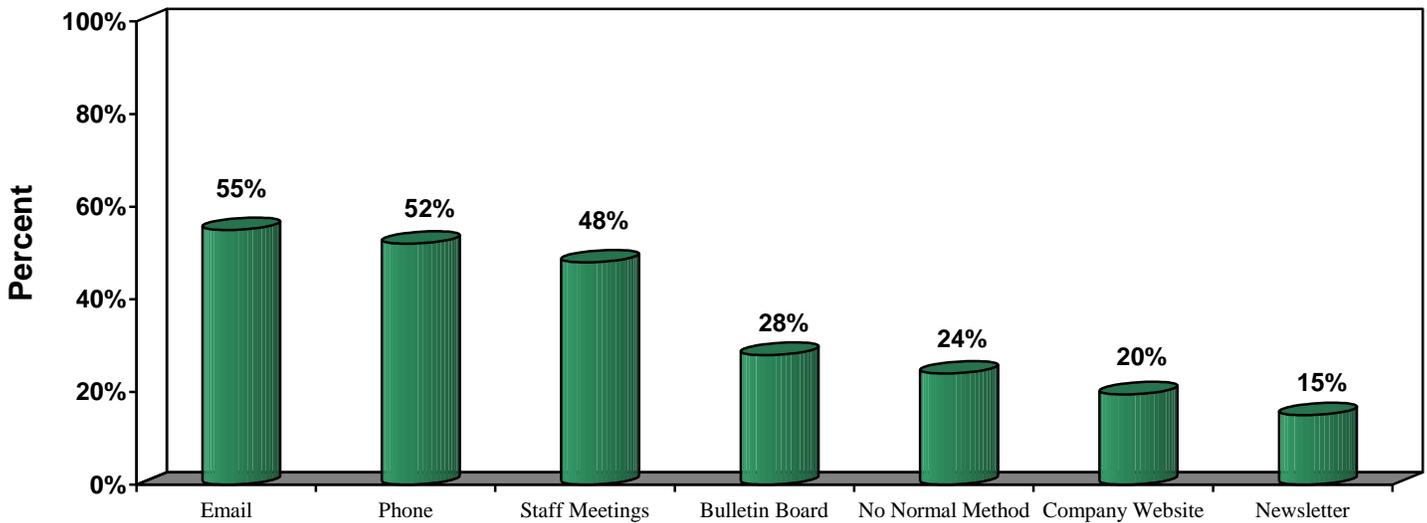


# Erie County Disaster Preparedness: Business Preparedness

**Preparedness Drills and Trainings at Erie County Businesses**



**Communication Methods at Erie County Businesses**



On a scale from 1 to 5, ...	Strongly Disagree	Strongly Agree	Average Rating
How much you agree with the following statement: Emergency planning for my company or business is a good use of resources.	1%	53%	4.3
How much you agree with the following statement: Emergency planning for my company or business will make me and my co-workers more safe and secure.	2%	57%	4.3

## Erie County Disaster Preparedness: Survey Demographics

- ◆ There were 587 Erie County residents who completed the survey.
- ◆ 79% of respondents owned their own home.
- ◆ Of those who took the survey, 79% live in a single-family house, 9% live in a condominium or townhouse, 9% live in an apartment, and 3% live in a manufactured or modular home.
- ◆ 68% of respondents had children in the household.

Variable	2011 Survey Sample
<b>Gender</b>	
Male	32.3%
Female	67.7%
<b>Race / Ethnicity*</b>	
White	94.7%
Black or African American	3.9%
American Indian and Alaska Native	1.6%
Asian	0.5%
Hispanic Origin (may be of any race)	2.3%
<b>Marital Status</b>	
Married Couple	63.5%
Never been married/member of an unmarried couple	13.2%
Divorced/Separated	16.0%
Widowed	7.3%
<b>Education</b>	
Less than High School Diploma	3.8%
High School Diploma	23.9%
Some college/technical school	33.4%
College graduate	38.9%
<b>Income</b>	
\$14,999 and less	16.6%
\$15,000 to \$24,999	14.8%
\$25,000 to \$49,999	30.2%
\$50,000 to \$74,999	19.9%
\$75,000 or more	18.5%

\* Race is greater than 100% due to participants checking more than one race.

## Erie County Disaster Preparedness: Sources

Source	Data Used	Website
AT&T Disaster Preparedness Survey Hurricane Katrina & Rita Results, August 2006	<ul style="list-style-type: none"> <li>◆ Disaster preparedness questions</li> </ul>	<a href="http://www.thebreakingnews.com/files/articles/att-disaster-survey.pdf">http://www.thebreakingnews.com/files/articles/att-disaster-survey.pdf</a>
Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System Questionnaire, 2010	<ul style="list-style-type: none"> <li>◆ General Preparedness</li> <li>◆ Demographic Questions</li> </ul>	<a href="http://www.cdc.gov/brfss/">http://www.cdc.gov/brfss/</a>
Federal Emergency Management Agency (FEMA), Ready: Prepare. Plan. Stay Informed.	<ul style="list-style-type: none"> <li>◆ Preparing Your Pets for Emergencies Makes Sense</li> <li>◆ Recommended Items for Basic Emergency Supply Kit</li> <li>◆ Tornadoes</li> </ul>	<a href="http://www.ready.gov">www.ready.gov</a>
Maui Resident Survey on Disaster Preparedness	<ul style="list-style-type: none"> <li>◆ Disaster preparedness questions</li> </ul>	<a href="http://www.surveymonkey.com/s.aspx?sm=s9hHZtO6OSxTaWqmY01xoQ_3d_3d">http://www.surveymonkey.com/s.aspx?sm=s9hHZtO6OSxTaWqmY01xoQ_3d_3d</a>
Ohio Committee for Severe Weather Awareness	<ul style="list-style-type: none"> <li>◆ Tornado Facts and Safety Tips</li> </ul>	<a href="http://www.weathersafety.ohio.gov">www.weathersafety.ohio.gov</a>
Ohio Department of Public Safety, ReadyOhio.	<ul style="list-style-type: none"> <li>◆ Flood Facts and Terms</li> </ul>	<a href="http://publicsafety.ohio.gov/NPM/ReadyForAFlood.stm">http://publicsafety.ohio.gov/NPM/ReadyForAFlood.stm</a>
Public Policy Institute of California Statewide Survey, March 2006	<ul style="list-style-type: none"> <li>◆ Disaster preparedness questions</li> </ul>	<a href="http://www.pplic.org/content/pubs/jtf/JTF_DisasterPreparednessJTF.pdf">http://www.pplic.org/content/pubs/jtf/JTF_DisasterPreparednessJTF.pdf</a>