

With The Public's Knowledge, We Can Make Sheltering in Place Possible



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REDEFINING
READINESS

With The Public's Knowledge, We Can Make Sheltering in Place Possible

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Introduction

...three-quarters of the people who would not be able to shelter in place under existing conditions would do so if certain issues were addressed.

In different kinds of emergencies, people need to be able to protect themselves in different ways. One such protective strategy involves “sheltering in place,” which means staying inside whatever building you happen to be in at the time of the emergency or, if you are outside, going into an undamaged building nearby and staying there for a period that may last hours to several days. Officials will instruct people in a danger zone to shelter in place if an explosion or chemical spill releases toxic dust, fumes, radiation, or chemicals outside. Community residents may want to protect themselves this way if an emergency like an electrical blackout or snowstorm makes it very difficult or unsafe for them to go anywhere else. Depending on when the emergency occurs, many of the people who need to shelter in place may be somewhere other than their homes – for example, at work, school, or shopping – apart from other household members.

In 2004, the *Redefining Readiness* study found that many people will *not* be able to shelter in place in an emergency.¹ Exploring how the American public would handle a “dirty bomb” explosion,² the study found that only three-fifths (59%) of the population would stay inside a building other than their own home for as long as officials told them. This is cause for concern because people who do not shelter in place will endanger themselves *and* others. When they go outside, they will expose themselves to toxic dust and radiation, and when they open the door to leave, they will put others in the building at risk by letting dust and radiation inside. If people with critical responsibilities leave their work places, the people who remain will lack needed support in handling the emergency and, in some cases, needed care as well (such as care for children in a day care center or for dependent residents in a nursing home). If a lot of people in the danger zone do not shelter in place, they will crowd the streets and roads when they leave their buildings, making it more difficult for first responders to get to the scene of the explosion.

Considerably more people could be protected in these kinds of emergencies, however. The *Redefining Readiness* study showed that three-quarters of the people who would *not* be able to shelter in place under existing conditions *would* do so if certain issues were addressed. But to make that possible, communities need a much better understanding of the problems people face when they try to protect themselves by sheltering in place and what individuals and organizations in communities could do to resolve those problems.

Below, we report how the *Redefining Readiness* demonstration sites went about doing that. We begin by describing the powerful new engagement practices that the sites developed to enable a large and inclusive group of people who live in their communities to contribute their knowledge to local emergency preparedness. We then present the combined insights of these community residents, which identify a range of serious and unanticipated problems that make it neither feasible nor safe for many people to shelter in place under current conditions.

While current instructions do not address most of these problems – and sometimes make matters worse – the ideas that residents had about actions that could be taken demonstrate that communities *can* make it possible for most people to shelter in place. Their suggested actions also show that a variety of approaches can be effective. To enable other people and organizations around the country to strengthen their shelter-in-place preparedness efforts, we have produced sets of specific issues for households, work places, schools and early childhood/youth programs, and governments to consider. Promoting an inclusive process for their use, we describe how the issue sets can help people and organizations become aware of critical protection issues that are within their purview to address and stimulate their thinking about contextually appropriate solutions.

As we discuss in the concluding sections of this report, the issue sets not only provide a framework for making protection possible in shelter-in-place emergencies, they can also help schools and work places avoid liability by clarifying what these organizations might reasonably be expected to do. By integrating the use of the shelter-in-place issue sets in grant programs – and by providing other incentives and supports – government agencies and private philanthropies can enable schools and work places throughout the country to realize these expectations. By applying the *Redefining Readiness* community engagement practices to other kinds of emergencies, communities can fix a fundamental flaw that is undermining preparedness efforts generally.

The Redefining Readiness Community Engagement Process

“...each of us is the only one who really knows what we and the other members of our household would face in the event of an emergency...”

To find out what it would take to make sheltering in place a more feasible protective strategy, teams of community residents in the four *Redefining Readiness* demonstration sites went directly to the people who would need to be protected – the other people who live and work in their communities. Urban and rural, with diverse populations, the four demonstration sites are: (1) the City of Carlsbad and South Eddy County, New Mexico; (2) the Humboldt Park neighborhood on the near northwest side of Chicago, Illinois; (3) the Benjamin Van Clark, Dixon Park, Live Oak, and Eastside Concerned Citizens neighborhoods in Savannah, Georgia; and (4) Choctaw, McCurtain, and Pushmataha Counties in southeast Oklahoma.

Working together and with a support team organized by the Center for the Advancement of Collaborative Strategies in Health at The New York Academy of Medicine, the sites have been developing new ways to engage the members of their communities in emergency preparedness. The first phase of their engagement process, completed in August 2006, entailed a series of small group discussions (SGDs) with community residents. Recognizing that each of us is the only one who really knows what we and the other members of our household would face in the event of an emergency, the SGDs were designed to (1) tap into the public’s common-sense knowledge to find out what the community would need to do to protect as many people as possible if certain kinds of emergencies occur; and (2) build resilience by giving community residents an opportunity to think about emergency situations in advance.

To achieve these objectives, the SGDs were organized very differently than traditional focus groups, public deliberations, or town hall meetings. Rather than asking people to think about emergency preparedness in the abstract or to provide their input about plans or policy options that have already been developed by experts, the SGDs used specific and realistic scenarios that enabled participants to think about emergencies in a frame of reference that was meaningful to them.

Over the course of two hours, ten people discussed two emergency scenarios – one of which involved sheltering in place in a dirty bomb explosion.³ The discussion about each scenario started by exploring the particular *problems* the participants would face trying to protect themselves in that situation. Then the group explored the kinds of *actions* that they and others in the community could take to address the problems they had identified.

Although, on average, only ten individuals were involved in each discussion, a large and representative group of people participated overall. In the four sites, almost 2,000 people participated in over 200 discussions. A comparison with census data shows that the participants in the SGDs closely resemble the people who live in each community, according to their age (18 and over), gender, race, ethnicity, education, income, household size, and access to telephone service.⁴ To achieve such inclusive participation, the discussions were held at convenient times and in places like community centers, churches, and residents' homes where people felt comfortable. Transportation, child care, and refreshments were provided. Discussions were conducted in Spanish as well as English.

To make sure that participants could express what really mattered to them during the SGDs, the discussions about the scenarios were unconstrained – focusing on whatever problems and actions were raised by each group – and no value judgments were made about anything that people said. The community residents who served as facilitators were trained to make participants feel comfortable expressing their ideas and to help them express their ideas as specifically as possible.

Care was also taken to ensure that the participants, and the community as a whole, have a complete, accurate, anonymous, and accessible record of the SGDs. The recorders wrote down exactly what each person said on flip charts – without identifying who said what. No one's ideas were reinterpreted or eliminated. Participants received a timely record of their own discussion. After combining the ideas generated in all of the SGDs, boxed sets of illustrated 8x10 cards were prepared to give this knowledge back to the people who live and work in the demonstration communities.⁵

The Problems People Face Trying to Shelter in Place

...toxic substances are not the only – or even the most important – risk that people face.

The SGDs gave people from many different backgrounds and walks of life an opportunity to think about shelter-in-place emergencies and to describe what they and their household members would face if they tried to protect themselves in whatever place they thought they would be at the time – outdoors, on the road, or inside office buildings, schools, day care centers, churches, shops, malls, medical facilities, service agencies, government buildings, residential buildings, garages, restaurants, or entertainment or sports facilities. Their combined insights identify *serious and unanticipated problems that make it neither feasible nor safe for many people to shelter in place under current conditions.*

Of particular importance, the SGDs document that in emergencies releasing chemicals, gases, or radiation, toxic substances are not the only – or even the most important – risk that people face. People want to avoid being exposed to the hazardous materials outside, and they are concerned about these substances coming into the building they are sheltering in. But there are other risks people can face while sheltering in place that would compel them to go outside and expose themselves to the toxic substances from the emergency.⁶ These risks, described below, explain why so many people said they would not be able to shelter in place in the *Redefining Readiness* study.

(1) People can't protect themselves by sheltering in place unless they have timely, specific, and believable information about the emergency.

As the SGDs reveal, communicating effectively with the public in a shelter-in-place emergency presents a variety of challenges. People throughout the community not only need to be made aware of the emergency, but they also need to know what they should do to protect themselves, which may vary depending on where they are.⁷ Larger places need to inform everyone inside – quickly and in ways that clarify the need to shelter in place in this particular emergency rather than to evacuate the building. People who are not in the danger zone need to know where the danger zone is so they don't inadvertently put themselves in harm's way going there. The public also needs to know when the emergency is over.

SGD participants identified a number of barriers that could prevent them or their family members from receiving timely information about the emergency, such as not having their radio, TV, or computer on at the time; not having access to a working telephone, radio, TV or the Internet in the place they would be; or being in a place where they might not be told about the emergency by the person in charge. In addition, the SGDs highlight how many people in communities have difficulty comprehending emergency information because they don't speak English, are hearing impaired, or have some form of cognitive impairment.

Even if officials are able to get the word out to everyone in a community, some people won't be sure that the emergency is real or that the instructions they are being given are the best thing for them to do. Repeatedly, SGD participants in all of the demonstration sites said that government officials would not give them accurate information, either because they don't care about the people in their neighborhood or because they would be using the threat of an emergency to scare and manipulate people. The *Redefining Readiness* study documented that many Americans feel this way. In the survey, two-fifths (41%) of the American people said they were seriously worried about what government officials would say or do in emergency situations. Lack of trust was even more prevalent among low-income groups and communities of color. The survey has not been repeated since Hurricane Katrina, but it is likely that trust levels are even lower after that experience.

(2) Informing people about the emergency and what to do is important, but the ability of people to protect themselves by sheltering in place depends on a lot more than communication and public education.

The SGDs reveal that once a person knows about the emergency and believes what he or she is told, the decision to shelter in place involves three individualized trade-offs:

- Do you have a place to stay that is actually safer than being outside?
- Are you able to protect yourself without endangering others who depend on you?
- Are you able to protect yourself without losing your home, possessions, or livelihood?

Not surprisingly, it is very difficult or impossible for people to shelter in place when the answer to one or more of these questions is "No."

(3) People can't protect themselves if they don't have access to shelter.

At the time of a shelter-in-place emergency, not everyone in the community will be inside a building. Instead, as SGD participants described, they or their household members may be working outside, engaging in outdoor sports or hobbies, walking on the street, living on the street because they are homeless, or in a car or bus. Some of these people won't be able to protect themselves because there aren't any buildings nearby. Others may not be allowed to enter a nearby building because doing so would expose the people inside to dust, radiation, or other toxic substances.

(4) People will not be safe while they are sheltering in place if they are exposed to toxic substances inside or if the building has been structurally damaged as a result of the emergency.

The SGDs reveal that toxic substances from outside can enter buildings in a variety of ways: through windows, walls, or ceilings that are broken or are not air-tight; through an open ventilation system; through doors that open and close automatically; and when people come into the building or leave. In addition, some buildings contain other toxic substances that can be dangerous if people stay inside for a prolonged period of time.

Recalling what happened at the World Trade Center on 9/11, SGD participants also highlighted the danger they would face if they were not aware that the building they are sheltering in is at risk of collapsing as a result of the emergency or at risk of fire because the electrical wires or gas lines have been damaged.

(5) People will not be safe while they are sheltering in place if they lack access to critical medications and medical supplies.

In these kinds of emergencies, many people will need to take shelter in a building other than their home. Consequently, any medications, food, water, and other supplies that they have at home *won't* be available to them. If a person's critical medical or basic needs are not met while they are sheltering in place, leaving the building may be the less dangerous option. Indeed, in the *Redefining Readiness* study, more than one-quarter (28%) of the people who said they would leave the building they were in would do so because they would feel safer elsewhere or would need to obtain medications, food, or other supplies.

The SGDs document the large number of children and adults in this country who take medications and/or receive medical treatments for chronic physical

and mental health conditions. Yet, in the course of the discussions, many participants realized that they and the other members of their household do not carry their medications or medical supplies with them when they leave the house or only carry a limited amount. Away from home, some participants noted that they have no place to refrigerate perishable medications, like insulin.

Access to medications, medical supplies, and medical care is always important, but it is especially critical in emergencies since the stress of the situation, itself, can exacerbate many underlying conditions (for example, by causing a person's blood pressure to rise or by precipitating an attack of asthma or angina). Without needed medications, people can develop serious flare-ups of their underlying medical condition, or they can have a dangerous reaction, like a seizure, from suddenly stopping a medication. Without needed supplies, such as strips to test blood sugar, people can become sick from taking the wrong dose of medications they have with them. Sheltering in place can also be dangerous if people lack access to needed treatments for chronic conditions, like dialysis, or to medical care for acute conditions, like childbirth, heart attack, stroke, or an injury resulting from the emergency.

(6) The basic needs of people sheltering in place involve more than food and water.

Going beyond medical needs, the SGDs also describe the basic needs that people's safety depends on while sheltering in place. Food and water are obviously important, but the SGDs reveal that the available food and water may not be safe to eat, drink, or use for washing if it has been exposed to toxic substances (for example, if a town water supply is contaminated or if a building gets some of its water from open tanks on the roof). Moreover, food and water may not be distributed equitably among people sheltering in a building.

The SGDs also highlight the importance of other basic needs, such as working bathroom facilities and hygienic supplies, breathable air and tolerable temperatures (which may be difficult to achieve if the vents and windows are closed), some form of clean bedding, enough space to walk around and lie down, and a way to communicate with the outside world. In addition to basic needs that apply to everyone sheltering in place, some people also have special dietary requirements (such as dependence on caffeine, allergies to certain foods, or the need to eat certain foods at certain times because of a medical condition, like diabetes), or a need for personal supplies (for example, to care for a baby or to clean and store contact lenses).

(7) To meet the medical and basic needs of people sheltering in place, critical supplies and facilities need to be sufficient for everyone inside and accessible to people in the rooms where they will be told to go to avoid toxic exposure.

In an emergency like a dirty bomb explosion or chemical spill, people in some buildings will be instructed to go to interior, windowless “safe rooms” in order to avoid the toxic substances outside. These rooms sound like reasonable places to take shelter, but the SGDs reveal that some of the safe rooms that have been selected are not large enough to accommodate everyone who would be likely to be inside at the time, which, in public places, can be many times the number of employees and staff. Others will not provide the people inside with access to toilet and washing facilities, communications, a refrigerator, or critical medical and basic supplies that are stored elsewhere in the building.

(8) People will not be safe if they are harmed by other people while they are sheltering in place.

Repeatedly, SGD participants expressed concerns about the other people who would be in the building with them, including people they know but don't trust (such as certain co-workers or students) as well as people they don't know (like strangers in a store, fast food restaurant, or movie theater). If these people become unruly, violent, or open the door to leave, other people sheltering in the building will be endangered.

The SGDs identified a number of conditions in a building they might be sheltering in that have the potential to provoke unruly or violent behavior in some people. These conditions include scarce food or water; lack of medications; extreme temperatures; overcrowding; foul odors or dirt; locked doors; access to weapons, alcohol, or illicit drugs; lack of access to needed caffeine or nicotine; lax security; and excessively tight security.

SGD participants also noted that inability to deal with emotional stress could make some people feel compelled to leave the shelter of the building, endangering others in the process. Sources of stress include fear and uncertainty about the situation (which is exacerbated by not having had an opportunity to think about this kind of emergency in advance); anguish and worry about people and animals you care about who aren't with you at the time; guilt about not being able to go to your job while sheltering in place; difficulty being confined in a building; not having anything useful or distracting to do while sheltering in place; and inability to deal with other people around you who are upset or suffering.

(9) Locking the doors may threaten people's safety.

Locking the doors seems like a reasonable thing to do in a shelter-in-place emergency, since toxic substances can come into the building when people enter or leave. As the SGDs reveal, however, this strategy can also put people in danger. Locking the doors denies shelter to people who are outside, leaving them in harm's way and causing considerable moral anguish for some of the people sheltering inside. If people who want to leave the building are not allowed to do so, they may become unruly or violent, endangering the other people who are sheltering there. If people outside cannot come in through the door, they may break into the building.

(10) To shelter in place, people need to be sure that others who depend on them won't be endangered.

Protecting yourself by sheltering in place means that you can't get to the people and animals you care about who aren't with you at the time. In the *Redefining Readiness* study, three-fifths (61%) of the people who said they would leave the shelter of their building would do so in order to take care of their children or other family members.

In all emergencies, people have a strong desire to find out where their loved ones are and how they are. If you are unable to communicate with the people you care about in an emergency, a natural tendency is to try to find each other or to go to a pre-arranged meeting place. In the course of the SGDs, many participants realized that the members of their household had never discussed what to do in a shelter-in-place situation. Consequently, they weren't aware that following such courses of action might put them in harm's way in this kind of emergency, particularly if searching for someone or reuniting with other family members involves leaving a safe place or inadvertently going into or through the danger zone.

The SGDs reveal that in shelter-in-place emergencies, people are especially concerned about others who depend on them for survival, such as their children, elderly or disabled parents, or pets. The SGDs explored the risks that these dependents face in shelter-in-place emergencies from the perspective of diverse participants: responsible family members, paid caretakers (including babysitters, day care providers, teachers and school staff, school bus drivers, and staff at after-school youth programs, senior centers, assisted living facilities, and nursing homes) and some of the dependents, themselves.⁸ As described below, the SGDs document that it is not currently possible for many people to protect themselves without putting their dependents in danger.

(11) Dependents face special risks if they are in the danger zone.

To illustrate the risks that dependents face, consider the situation for children. At the time of a shelter-in-place emergency, many children will be with paid caretakers – at school, day care, an after-school program, on a school bus, or at home. If the place they are in is located in the danger zone, their well-being depends on the ability of these caretakers to protect them from the toxic substances outside while continuing to meet their basic and medical needs and helping them cope with the emotional stress of the emergency.

In the course of the SGDs, many parents and guardians recognized that they had never discussed a shelter-in-place emergency with their child’s sitter or with the staff at their child’s school, day care center, or after-school program. Moreover, very few of the paid caretakers participating in the SGDs knew how they or their organization would handle such an emergency or what their responsibilities would be. It is not surprising, then, that a large number of children are currently at risk because their school, early childhood program, or youth program does not have a sufficient supply of their medications or written permission to administer these medications to the child in the event of an emergency or because their parents or guardians have not stored personal items that are critical to meeting their basic and emotional needs in an emergency (such as special foods if they have allergies, a comfort toy or blanket, or things to help them go to sleep). In some schools, the classrooms, bathroom facilities, and cafeteria are in separate buildings, so during a shelter-in-place emergency, students, teachers, and staff will not be able to get food or use the bathroom without exposing themselves to the toxic substances outside.

The SGDs reveal another risk that children and other dependents face – not having sufficient staff to care for them during the emergency. Since many of the people who are paid to care for other people’s dependents are also responsible for dependents of their own, concerns about their own dependents will prevent some of them from fulfilling their work obligations.

(12) Dependents can still be at risk even if they are *not* in the danger zone.

Children, elderly and disabled adults, and pets have limited capacity to care for themselves under all circumstances. Consequently, even if they are not in the danger zone during the emergency, they can still be at risk if the person they depend on has to shelter in place elsewhere and cannot care for them.

The SGDs reveal that many people currently do not have a reliable back-up system in place to assure that their responsibilities to dependent family members will be fulfilled if they have to protect themselves by sheltering somewhere else. Some have no back-ups to take their place. Others have identified only one, which is not sufficient since that person may not be able to show up because he or she is also sheltering in the danger zone. In the course of the discussions, SGD participants also recognized that some back-ups will not be allowed to fulfill certain responsibilities – like picking up children from school – unless they have been authorized to do so in advance.

Parents and guardians in the SGDs were particularly concerned about the risks their children would face if they were left unsupervised. This could happen if children are let off a school bus without assurance that a responsible adult is available to take care of them, or if children who are not picked up can't count on continued supervision and care by their school, day care, after-school program, or sitter. If schools, day care, and after-school programs have made plans to address these supervision issues, the parents, guardians, teachers, bus drivers, and other staff who participated in the SGDs were unaware of them.

(13) To shelter in place, people need to be sure that they won't lose their home, possessions, or livelihood and that their critical job responsibilities will be fulfilled in their absence.

In addition to dangers to loved ones and dependents, sheltering in place involves other trade-offs that make it difficult or impossible for people to protect themselves. Some SGD participants were concerned that security in their neighborhood would be lax since police would be concentrating on responding to the emergency, itself. Consequently, if they sheltered in place, they would risk having their homes broken into or their businesses looted. Other SGD participants said they would need to leave the protection of their buildings in order to go to work, either to make sure they wouldn't be fired or lose needed income for not showing up, or because they are first responders, health professionals, or providers of other essential services in the community and are not confident that sufficient back-up would be available if they couldn't go to their jobs.

(14) Much of what people and organizations currently are being told to do does little to help and sometimes makes matters worse.

The SGDs reveal that a number of the serious problems people face trying to protect themselves by sheltering in place are not being addressed effectively by current instructions.⁹ For example:

- Currently, the public is being instructed to keep a supply of food and water in their homes, and most keep their medications there as well. But in a shelter-in-place emergency many people will need to take shelter in buildings *other* than their homes, so any food, water, or medicines that they have at home *won't* be available to them. The “emergency supply kits” or “go bags” that the public is being instructed to prepare are primarily designed for people to take with them when they evacuate their homes rather than to keep at work, school, or day care.
- The public is being told to identify places for family members to reunite in the event of an emergency. But the instructions do not address situations when it might not be safe to go to such a place, such as when you would have to go through a danger zone in order to get there.
- Building and work place managers are being told to designate people to be in charge during emergency situations. But since these people are human too, some of them may leave to take care of their own children or family members. Current instructions do not address the need for people in charge to assure proper care for their dependents if they cannot be with them during the emergency. Nor do the instructions address how the safety of workers and customers sheltering in place can be assured if some or all of the people in charge leave the building. If critical information about the building is not available, no one else will know where things are or what to do.
- Managers are also being told to identify “safe rooms” where people can go to be protected from toxic substances outside. But while detailed instructions are usually given for sealing the room, little or no attention is paid to identifying and preparing rooms that: (1) can accommodate the number of people who are likely to need shelter; (2) give the people inside safe access to the supplies and facilities that are critical to meeting their basic, medical, and emotional needs; (3) assure breathable air and tolerable temperatures; and (4) minimize other conditions that can provoke unruly or violent behavior.

- School safety officers are being instructed to employ “lockdown” procedures in a variety of emergencies, but they are not being told to consider the dangers that can be created by locking children and staff in certain classrooms or by locking the school doors when toxic substances and exposed people are outside. Similarly, safety officers are not being told about the dangers of enacting policies that prohibit students from bringing cell phones to school. If parents can’t communicate with their children at school during a shelter-in-place emergency, they may feel compelled to leave the building they are in, endangering themselves and others in the process.

A Practical Framework for Making Protection Possible in Shelter-in-Place Emergencies

“...communities can make sheltering in place a safe and feasible protective strategy for most people...”

The problems identified in the SGDs explain why it is currently difficult or impossible for many people to protect themselves in emergencies by sheltering in place. Once the participants in the SGDs identified the problems they would face, however, they were in a good position to think about ways to address those problems. Their ideas about specific actions that can be taken are available in the set of illustrated cards entitled *What Makes Protection Possible? Looking at Emergencies Through the Eyes of Community Residents in the Redefining Readiness Demonstration Sites*.¹⁰ Collectively, these actions demonstrate that communities *can* make sheltering in place a feasible protective strategy for most people – a strategy that ***keeps individuals safe without endangering the people and animals they care about who aren't with them at the time and without putting their homes or livelihoods at risk***. Many people and organizations are part of the solution, *not* just government.

While the SGDs show that many more people can be protected in shelter-in-place emergencies than is currently possible, there are clearly a variety of ways that people and organizations in communities can address the problems involved. Consequently, instead of taking a prescriptive approach to shelter-in-place preparedness, we have used the knowledge that community residents contributed through the SGDs to prepare sets of specific issues for households, work places, schools and early childhood/youth programs, and governments to consider. The four issue sets are presented in the Appendix to this report.¹¹

The ***Redefining Readiness issue sets*** provide households, work places, schools and early childhood/youth programs, and governments with practical frameworks for thinking about issues that are critical to the public's protection. Tailored specifically to each kind of user:

- The set for **households** includes issues related to: (1) the need for household members to shelter in place; (2) communication; (3) protection from toxic substances outside; (4) basic and medical needs; (5) care for dependents; (6) emotional distress and violence; and (7) the household's emergency planning process.
- The set for **work places** (designed for places where people work and others may shop, receive services, volunteer, study, pray, or be entertained) includes issues related to: (1) the responsibility of the work place to provide shelter; (2) communication; (3) protection from toxic substances outside; (4) basic and medical needs; (5) emotional distress and violence; (6) employee responsibilities, incentives, and supports; and (7) the work place's emergency planning process.
- The set for **schools and early childhood/youth programs** (designed for places where dependent children go on a regular basis) includes issues related to: (1) the responsibility of the school or program to provide shelter; (2) communication; (3) protection from toxic substances outside; (4) basic and medical needs; (5) emotional distress and violence; (6) staff responsibilities, incentives, and supports; and (7) the school or program's emergency planning process.
- The set for **governments** (designed for government agencies and policy makers at multiple levels) includes issues related to: (1) the declaration of a shelter-in-place emergency; (2) responsibility for government workers and people in government buildings; (3) public communication; and (4) public incentives, supports, and protections.

Rather than telling anyone what to do, the *Redefining Readiness* issue sets present a series of questions for people in households, work places, schools and early childhood/youth programs, and governments to consider. ***The questions are designed to make people in each group aware of important issues that are within their purview to address.*** Prior to the SGDs, many of these issues had not been identified or understood, so it isn't surprising that current plans and instructions do not deal with them effectively. The questions in the issue sets are also designed to ***stimulate people's thinking about potential solutions.*** Repeatedly in the SGDs, effective actions jumped to mind as soon as participants became aware of a particular problem.

For example, to minimize dangers to household members, SGD participants suggested that families discuss shelter-in-place emergencies in advance, making sure that they: (1) stay where they are during the emergency so they don't put

themselves in harm's way by trying to find each other or by going to a pre-arranged meeting place; (2) stock up on their medications and keep at least a three-day supply with them at all times; (3) store critical supplies at work – *not* just at home – including items like hygiene products, extra clothes, a blanket and pillow, instant tea or coffee (if they need caffeine), and nicotine gum (if they smoke); (4) store emergency kits for their child at school or day care; (5) make sure that the school or day care center has a supply of their child's medications and authorization to administer those medications in the event of an emergency; and (6) arrange alternate providers of care for people and animals who depend on them, with multiple back-ups so they can be sure that their own caretaker responsibilities will be fulfilled in an emergency.

To minimize dangers to employees, students, and customers in the event of this kind of emergency, SGD participants suggested that schools, work places, and other public places identify safe rooms that not only protect people from the toxic substances outside, but also provide them with access to critical supplies and facilities, including bathrooms. As an alternative to locking the doors, they suggested that these places develop strategies that would make it possible for people to enter and leave the building without exposing those inside to dangerous amounts of toxic substances. One option would be to have a second set of doors and a separate place where people coming in from outside could stay apart from those who are already in the building.

How should households, work places, schools and youth programs, and governments go about considering the questions in the *Redefining Readiness* issue sets and figuring out how to address them? In contrast to traditional approaches to emergency preparedness, we believe ***the process needs to be as inclusive as possible***. For example, schools would need to involve not only the safety officer, building custodian, and principal in the process, but also the school's teachers, teacher's aides, bus drivers, nurses, guidance counselors, parents, and students.

An inclusive approach is important for several reasons. For one, many different kinds of knowledge and perspectives are required to figure out the best way to deal with the issues on each list. Consequently, if people are left out it will be difficult to appreciate fully how a particular household or organization is affected by the issues; what can be learned from its past experiences with emergencies; the constraints under which it is operating; and what each person involved in the household or organization can and wants to contribute to addressing the issues.

The other reasons for promoting an inclusive process relate to resilience, relationships, and trust. People are more resilient – in other words, better able to deal with emergencies – when they have an opportunity to think about the problems they would face in advance and figure out what can be done to solve those problems. Since the process for considering and addressing each issue set provides people with such an opportunity, the resilience of a household or organization will be greater if more people are involved. Working with other people on an issue set will also build relationships among the people in a household or organization, which will subsequently help them to support and work with each other in non-emergency situations as well as emergencies. In addition, the people who participate actively in considering and addressing an issue set will have contributed substantially to developing the household's or organization's shelter-in-place plan. People are better informed about plans that they help to develop. Even more important, when the plan effectively addresses issues that are critical to the protection of people in a household or organization, the plan and the planning process will be worthy of their confidence and trust.

The Legal Context: Liability and Reasonable Expectations

“The SGD findings help to clarify what organizations might reasonably be expected to do by identifying critical issues that need to be addressed in shelter-in-place planning ...”

Benefiting from the combined knowledge of almost 2,000 community residents in the four *Redefining Readiness* demonstration sites, households and organizations throughout the country can now anticipate problems they were not aware of before that are critical to people’s protection and take steps to greatly enhance the effectiveness of their shelter-in-place planning and preparations. By doing so, many more people will be able to protect themselves and their loved ones in emergencies ranging from toxic explosions and chemical spills to electrical blackouts and snowstorms.

In addition to making protection possible in shelter-in-place emergencies, the findings of the SGDs can also help organizations avoid liability. The legal system’s assessment of liability asks whether an organization acted reasonably, in light of the circumstances, based on what was known or should have been known at the time. The SGD findings help to clarify what organizations might reasonably be expected to do by identifying critical issues that need to be addressed in shelter-in-place planning and by providing a process and examples of common-sense strategies to help organizations develop contextually appropriate solutions. Below, we discuss liability and reasonableness in several contexts: schools, work places, and governments.

Schools

School systems have a legal obligation to protect children who are within their custody from foreseeable harm, whether they are in school, involved in school-related activities, or on school buses. This duty arises from the truancy laws in each state, which require children to attend school. Because the child’s relationship with the school district is not voluntary, “the protective custody of teachers [and administrators] is mandatorily substituted for that of the parent.”¹²

In recognition of this general *in loco parentis* duty of care, states have enacted statutes that require school districts to develop specific plans for emergencies. The particulars of each state’s law differ but, in general, school districts already

have a system for creating and implementing plans that take into account a range of emergency situations.¹³ The school’s responsibility for students continues throughout an emergency so long as children are in the custody of the school. Custody ends once the child has “passed out of the orbit of its authority in such a way that the parent is perfectly free to reassume control over the child’s protection...”¹⁴

If students were harmed during an emergency, the legal question of whether the school could be liable would focus on whether the school had taken reasonable steps to avoid foreseeable harm – in other words, if it failed to use ordinary and reasonable care under the circumstances.¹⁵ The findings of the SGDs are very valuable in this regard because they can help school officials avoid the potential liability that can result from overlooking issues that are critical to the protection of students in a shelter-in-place emergency.

The *Redefining Readiness* issue set for schools can alert administrators and safety officers to emergency procedures that may be appropriate in some situations, but not others. For example, in an outbreak of violence in the school, it may be reasonable to lock students and staff in classrooms. But that strategy may be dangerous in a dirty bomb explosion if the windows can’t be sealed and the people in the classrooms do not have access to water, food, bathroom facilities, and medications.

Another way the issue set can help is by alerting schools to limitations in the scope or implementation of current emergency procedures. For example, many schools have forms for parents and guardians to fill out to authorize particular people to pick up their children from school. But some parents may not have filled out such a form and others may not have designated a sufficient number of back-ups to account for those who will need to shelter in place themselves during this kind of emergency. Similarly, some parents may not have provided the school with a supply of their children’s medications, or if they have, may not have authorized school employees to administer the medications in an emergency.

The issue set can also alert schools to areas where additional emergency procedures or training may be needed to prevent avoidable harm from occurring. Examples include procedures to assure that children are not let off a school bus unless a responsible adult is available to take care of them, steps to enable staff and children to communicate with loved ones who are not with them in the school

building, assistance to staff in making arrangements to assure that their own dependents will be safe in an emergency, and training for bus drivers to assure that they know where to go and what to do to keep children safe and calm during this kind of emergency.

Work Places

In emergencies, the owners and managers of work places have a duty of care toward the people inside. In a shelter-in-place emergency, the people needing to stay inside an office would primarily be employees. In other establishments, like retail stores or theaters, customers could easily outnumber employees.

Legal issues related to employees are guided by the Occupational Safety and Health Act (OSHA).¹⁶ The “general duty” clause of OSHA requires that each employer provide “employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm.”¹⁷ In interpreting this standard, courts ask whether a “reasonably prudent employer” through the exercise of due diligence would have realized what was necessary to avert a hazard.¹⁸ An employer who was aware of the danger can be found liable based on the current state of knowledge in the field and what the employer should have known.¹⁹ In considering whether employers had violated OSHA, courts have assessed not only whether a danger was reasonably foreseeable and preventable, but also whether measures existed that the employer could have taken which were feasible and likely to have been effective in preventing the danger.²⁰

OSHA has developed extensive guidelines to protect workers in many different occupations. In addition, OSHA requires that employers with more than ten workers adopt written emergency action plans that include procedures for evacuation and the identification of which employees would be responsible for critical tasks during an emergency.²¹ OSHA advises that plans should address “emergencies that the employer may reasonably expect in the work place.”²²

Legal questions about an employer’s duty toward customers arise not from OSHA but from general principles of liability for failure to take reasonable precautions to guard against hazards to persons whom one invites onto the premises. In a store or other establishment that is open to the public, those persons would include any shoppers or other persons lawfully on the premises. If these people are injured in a retail store or service business, they could potentially file a lawsuit for damages if the business owner had not taken reasonable steps to

avoid the dangerous condition.²³ Most employees who are injured while on the job are covered by workers' compensation, a no-fault insurance system that pays benefits to individuals injured in the course of their employment.²⁴

The *Redefining Readiness* issue set for work places can help employers meet their OSHA requirements as well as avoid potential liability. The issue set addresses one kind of “emergency that employers may reasonably expect in the work place” – emergencies that require employees and the other people inside to shelter in place. The issues identify a number of “foreseeable and preventable dangers” that employers may not have been aware of before. In the process of considering and addressing the issues, employers, employees, and customers can implement practical and often inexpensive steps to avoid these dangers.

For example, the issue set can alert employers to previously unappreciated situations where people inside would need to be given the option to shelter in the building, such as an electrical blackout that would prevent some of them from going to another safe place. Vulnerabilities of employees who work outside may become more apparent, stimulating actions to assure they have two-way communication and access to shelter. By drawing attention to the actual number of people who are likely to be inside during a shelter-in-place emergency as well as the critical supplies and facilities they would need, the issue set can help work places identify and prepare more appropriate safe rooms. The issue set can also help work places clarify employee responsibilities during shelter-in-place emergencies and take steps to assure that everyone inside will be protected even if critical employees leave or don't show up.

Governments

Standards for governmental action derive from the Constitution as well as a large number of statutes enacted by the Congress and state and local legislatures. When courts find that governmental entities have not lived up to the requirements imposed on them by law, they may issue injunctions, ordering that certain acts take place, or, in certain instances, may order damages to be awarded to citizens who suffer as a result.

Since governments assume a large number of responsibilities in responding to emergencies, it is difficult to predict how courts would assess potential liability for the failure to act in certain ways in directing and implementing a shelter-in-place response. Monetary damages will not be awarded against government officials for their policymaking or discretionary choices, on the theory that

public officials should not have to fear being second-guessed by the courts when electing to follow one lawful plan or policy rather than another.²⁵ However, where statutes contain clear directions, government officials may be ordered to follow those directions or be sanctioned when they fail to do so. A federal court in Louisiana, for example, found that the Federal Emergency Management Agency (FEMA) was liable after Hurricane Katrina for its failure to carry out certain mandatory, non-discretionary policies set up for disaster relief.²⁶

Most of the shelter-in-place issues included in the *Redefining Readiness* government issue set pertain to local and state governments, whose laws outlining governmental duties in emergencies vary by locality. Regardless of how those duties are structured, however, or what degree of policy discretion government officials might have, the process of considering and addressing the issues can help policy makers and government agencies protect the people in their jurisdiction more effectively in shelter-in-place emergencies and avoid taking steps that could inadvertently put some of them in danger. Specifically, the issue set can help policy makers and government agencies:

- Clarify the circumstances under which residents will be instructed to protect themselves by sheltering in place.
- Assess and strengthen methods for informing the public about shelter-in-place emergencies and for helping residents find out how their loved ones are and where they are during such an emergency.
- Explore government's role in: (1) assuring that work places, schools, businesses and other places have prepared effectively to shelter the people inside; (2) providing shelter for people who are outside in a dangerous area; (3) assuring the safety of buildings where people will be sheltering; (4) organizing a system of medical consultation and support for people sheltering in buildings; (5) patrolling the streets in uncontaminated areas to prevent break-ins; and (6) partnering with community organizations and groups.

Conclusion: Enabling Readiness

..... *Redefining Readiness* tools and practices can help fix a fundamental flaw that is undermining efforts in all areas of emergency preparedness.

Harnessing the knowledge of the broad range of people who need to be protected in shelter-in-place emergencies, the *Redefining Readiness* demonstration sites have developed a sound and reasonable framework to guide preparedness planning. The practical tools that have emerged from this work will enable people and organizations around the country to use the framework to strengthen their preparedness efforts. The tailored issue sets are designed to help households, work places, schools and early childhood/youth programs, and governments anticipate critical protection issues that are within their purview to address. By using an inclusive process and looking at examples of strategies that were suggested in the SGDs, they can develop contextually appropriate strategies to address their issues.

Making the *Redefining Readiness* framework and tools available does not mean they will actually be used, however. One reason for households and organizations to adopt them is to create conditions that will enable many more people to protect themselves in shelter-in-place emergencies than is currently possible. Of note, addressing protection issues in one venue can have far reaching effects in a community. For example, by assuring the safety of children, schools will also make it more feasible for their parents to shelter wherever they happen to be, thus helping to assure the parents' safety and the safety of the other people sheltering with them.

By clarifying what schools and work places might reasonably be expected to do, the *Redefining Readiness* framework can also help these organizations avoid liability in shelter-in-place emergencies. Insurance companies could strengthen this incentive by reducing premiums for organizations that meet reasonable expectations criteria based on the framework. State governments could require insurance companies to certify that such criteria have been met by organizations purchasing liability insurance.

Recognizing the enabling power of funding, governments could target tax incentives to small businesses that meet reasonable expectations criteria based on the *Redefining Readiness* framework. In addition, government agencies and private philanthropies could integrate the use of the *Redefining Readiness* framework and tools in their grant programs. One potentially suitable example is the Emergency Response and Crisis Management grant program operated by the U. S. Department of Education, under which hundreds of school districts have applied for federal funding.²⁷ This grant program publishes guidelines and suggested best practices, which allow local school districts to take advantage of new knowledge as well as each other's experiences related to emergency preparedness. Similar kinds of grant programs could also be developed for businesses and non-profit organizations. Such programs are sorely needed since continuity of operations – rather than the safety and well-being of employees and customers – has been the primary focus of preparedness efforts in these sectors.

Going beyond shelter-in-place emergencies, the community engagement practices developed by the *Redefining Readiness* demonstration sites can help to fix a fundamental flaw that is undermining efforts in all areas of emergency preparedness. ***Currently, planners are developing emergency instructions for people to follow without finding out whether it is actually possible for them to do so or whether the instructions are even the most protective action for certain groups of people to take.***²⁸ The *Redefining Readiness* study documented this problem in preparations for shelter-in-place emergencies and deadly contagious disease outbreaks, predicting that large numbers of people would suffer and die unnecessarily if response strategies are not based on what people will actually face when a disaster strikes. This prediction was proven to be correct during Hurricane Katrina, when many people could *not* follow instructions to evacuate due to barriers that had not been identified or addressed beforehand.

The only way to fix the flaw is to ground preparedness efforts in the knowledge and experiences of the people who will need to be protected in emergency situations. Community members now have an effective way to do this, by using the *Redefining Readiness* small group discussion process to enable a large number of diverse residents to explore what they would face in the kinds of emergencies that are most likely to occur in their locality.

Acknowledgments

The general public is often characterized as being apathetic about emergency preparedness. But this report, which presents the public's invaluable, common-sense insights about protection in shelter-in-place emergencies, documents the strong interest of almost 2,000 community residents to contribute their knowledge to local preparedness efforts. Their involvement, in turn, was made possible by teams of other community residents in the four *Redefining Readiness* demonstration sites, who worked tirelessly with each other and with members of the *Redefining Readiness* support team to create and implement powerful new ways for people from diverse backgrounds to contribute their knowledge. The framework we now have for making protection possible in shelter-in-place emergencies – and for fixing a fundamental flaw in emergency preparedness generally – is a tribute to all of them.

We are also indebted to the W. K. Kellogg Foundation for its generous support of the *Redefining Readiness* Study and Local Demonstration Projects. Barbara Sabol, in particular, played a major role in catalyzing and nurturing this work. Because of her vision and commitment, there is a growing recognition that we need to learn *from* the public in order to protect the public. Equally important, communities around the country now have practical frameworks and tools to enable them to do so.

Notes and References

¹ The *Redefining Readiness* study gave the American people their first opportunity to describe what they would face in two kinds of terrorist attacks – a smallpox outbreak and a dirty bomb explosion. Comprehensive and rigorous, the study involved in-depth conversations with government and private-sector planners, 14 group discussions with diverse community residents around the country, and a telephone survey of 2,545 randomly selected adults in the continental United States. To capture perspectives that would otherwise be under-represented, the survey was conducted in English and Spanish and oversampled African Americans and people in the cities that experienced the 9/11 attacks (New York City and Washington, D.C.). The study report (Lasker RD. *Redefining Readiness: Terrorism Planning Through the Eyes of the Public*. New York, NY: The New York Academy of Medicine, 2004), instruments, and comprehensive bibliography are available at www.redefiningreadiness.net.

² A dirty bomb is not a nuclear bomb. It is an ordinary bomb that has radioactive material mixed in it, so the explosion spreads radioactive material on the ground and into the air.

³ The shelter-in-place scenario takes place on a weekday afternoon when you are in a building other than your own home without other household members. A dirty bomb has just exploded a mile from where you are and a dust cloud contaminated with radioactive material is moving in your direction. You are instructed to stay inside the building you are currently in because that is the best way to protect yourself from the dust and radiation.

⁴ Anonymous questionnaires – completed at the end of each discussion – were used to obtain information about the sociodemographic characteristics of SGD participants.

⁵ PDFs of the cards presenting the complete findings of the small group discussions (*What Makes Protection Possible? Looking at Emergencies Through the Eyes of Community Residents in the Redefining Readiness Demonstration Sites*. New York: The New York Academy of Medicine, 2007) are available in English and Spanish at www.redefiningreadiness.net.

⁶ This finding calls into question the assumption that the public suffers from “radiophobia”: an irrational fear of radiation that trumps other more familiar dangers. For a discussion of radiophobia, see *Radiological Terrorism: Public Response and the Search for Resilience*. Center for International Trade and Security; University of Georgia. November 17, 2006. Also see Lasker RD. Looking at Radiological Terrorism through the Eyes of the Public: The First Step in a Meaningful Government-Public Partnership. In *Social and Psychological Effects of Radiological Terrorism: NATO-Russia Advanced Research Workshop Proceedings*. (2007: in press).

⁷ The best protective strategy in a toxic explosion, for example, may be sheltering in place *or* evacuation depending on where people are in relation to the site of the explosion and the direction of the wind.

⁸ Because of the nature of the discussions, participation in the SGDs was limited to people 18 years of age and older. Participants included adults who were dependent on others because of injury, chronic disability, or age.

⁹ For examples of current instructions, see the following: Arizona Department of Education. Arizona School Emergency Response Plan and Minimal Requirements Checklist. Arizona. 2006. Available online at <http://www.ade.state.az.us/sa/health/schoolsafety/safetyplans/response.asp>. Accessed 3/14/07.

National Fire Protection Association. *NFPA 1600 Standard on Disaster/Emergency Management and Business Continuity Programs*; 2004 Ed. Quincy, MA.

Available online at www.nfpa.org/assets/files/pdf/nfpa1600.pdf. Accessed 3/26/07.

New Mexico Department of Health New Mexico Surety Task Force. *New Mexico Family Emergency Preparedness Guide*. New Mexico. 2004.

Available online at

www.nmshtd.state.nm.us/upload/images/pdf/family_Emergency_Preparedness.pdf.

Accessed 3/14/07.

New York City Office of Emergency Management. *Ready New York: A Household Preparedness Guide*. New York, NY. 2007.

Available online at www.nyc.gov/html/oem/html/ready/household_guide.shtml. Accessed 3/14/07.

Fact sheet on Sheltering in Place. New York, NY. 2007.

Available online at http://www.nyc.gov/html/oem/html/ready/emergency_sip.shtml.

Accessed 3/14/07.

New York State Department of Health. *Fact sheet on Dirty Bombs*. Albany, NY. 2005.

Available online at http://www.health.state.ny.us/environmental/emergency/dirty_bombs.htm.

Accessed 3/14/07.

Nonprofit Coordinating Committee of New York. *Disaster Planning, Emergency Preparedness and Business Continuity*. New York, NY.

Available online at http://www.npccny.org/info/disaster_plan.htm. Accessed 3/14/07.

U.S. Department of Education, the Office of Safe and Drug-Free Schools. *Practical Information on Crisis Planning: A Guide for Schools and Communities*. Washington D.C. 2003.

Available online at www.ed.gov/emergencyplan/crisisplanning.pdf. Accessed 3/19/07.

U.S. Department of Health and Human Services Centers for Disease Control and Prevention. *Fact sheet on Chemical Agents: Facts about Sheltering in Place*. Atlanta, GA. 2006.

Available online at <http://www.bt.cdc.gov/planning/shelteringfacts.asp>. Accessed 3/19/07.

Fact sheet on Sheltering in Place during a Radiation Emergency. Atlanta, GA. 2005.

Available online at <http://www.bt.cdc.gov/radiation/shelter.asp>. Accessed 3/19/07.

U.S. Department of Homeland Security and Citizen Corps. Ready.gov *Fact sheets on deciding to stay or go; Chemical Threat; and Radiation Threat*. Washington D.C. 2006.

Available online at <http://www.ready.gov/beinformed.html>. Accessed 3/14/07.

Ready.gov brochures: *Emergency Supply List; Preparing Makes Sense for People with Disabilities and Special Needs; Preparing Makes Sense for Older Americans; Preparing your Pets for Emergencies Makes Sense*. Washington D.C. 2006.

Available online at

www.ready.gov/america/downloads/Ready_Brochure_Screen_EN_20040129.pdf

www.ready.gov/america/getakit/disabled.html

www.ready.gov/america/getakit/seniors.html

www.ready.gov/america/downloads/pets.pdf.

Accessed 3/14/07.

Overview and fact sheets on business preparedness. Washington D.C. 2006.

Available online at <http://www.ready.gov/business/overview/index.html>. Accessed 3/14/07.

U.S. Department of Homeland Security, FEMA. *Fact sheet on Radiological Dispersion Device*. Washington D.C. 2006.

Available online at <http://www.fema.gov/hazard/terrorism/rad/index.shtml>. Accessed 3/19/07.

¹⁰ English and Spanish versions of the illustrated card set are available in PDF format at

www.redefiningreadiness.net.

- ¹¹ Each type of issue set, with a distinct illustrated cover, is available in PDF format at www.redefiningreadiness.net.
- ¹² McLeod v. Grant County School Dist. No. 128, 255 P.2d 360, 362 (Wash. 1953).
- ¹³ Heather K. Brickman and Sara E. Groom, Antiterrorism Planning in the Schools: Practical and Legal Considerations in *School Violence: From Discipline to Due Process* (James C. Hanks, ed.) (2004).
- ¹⁴ Pratt v. Robinson, 349 N.E.2d 849, 852 (N.Y. 1976) (applying Restatement of Torts 2d § 320).
- ¹⁵ See, for example, King v. Northeast Security Inc., 732 N.E.2d 824, 832 (Ind. App. 2000).
- ¹⁶ 29 U.S. Code § 651 et seq. Some employers are governed by state-level plans approved by the U. S. Department of Labor, but all state standards meet the federal requirements as well.
- ¹⁷ 29 U.S. Code § 654(a)(1).
- ¹⁸ W.G. Fairfield Co. v. Occupational Safety & Health Review Comm'n, 285 F.3d 499, 503 (6th Cir. 2002).
- ¹⁹ New York State Elec. & Gas Corp. v. Secretary of Labor, 88 F.3d 98 (2d Cir. 1996); Otis Elevator Co. v. Occupational Safety & Health Review Comm'n, 581 F.2d 1056 (2d Cir. 1978); Getty Oil v. Occupational Safety & Health Review Comm'n, 530 F.2d 1143 (5th Cir. 1976).
- ²⁰ Safeway, Inc. v. Occupational Safety & Health Review Comm'n, 382 F.3d 1189 (10th Cir. 2004); National Realty & Construction Co. v. Occupational Safety & Health Review Comm'n, 489 F.2d 1257 (D.C. Cir. 1973).
- ²¹ 29 C.F.R. § 1910.38. By cross-referencing other sections of the statute, the requirement for emergency action plans extends to most employers. See *How to Plan for Work Place Emergencies and Evacuations*, OSHA 3088 at 11 (2001 rev.) and *Compliance Policy for Emergency Action Plans and Fire Prevention Plans*, CPL 2-1.037 at 5-6 (2002).
- ²² 29 C.F.R. § 1910.38 (1) subpart E App.
- ²³ See, for example, Meek v. Wal-Mart Stores, Inc., 806 A.2d 546 (Conn. App. 2002); Repecki v. Home Depot USA, 942 F. Supp. 126 (E.D.N.Y. 1996).
- ²⁴ Jack B. Hood, et al., *Workers' Compensation and Employee Protection Laws* (1999).
- ²⁵ Berkovitz v. United States, 486 U.S. 531, 536-37 (1988).
- ²⁶ McWaters v. FEMA, 436 F. Supp.2d 802 (E.D.La. 2006).
- ²⁷ U.S. Department of Education Emergency Response and Crisis Management Grant Program. Available online at <http://www.ed.gov/programs/dvpemergencyresponse/index.html>. Accessed 4/2/07.
- ²⁸ Lasker RD: Fixing the Flaws: Why Emergency Planners Need the Public's Knowledge. *IAEA Bulletin*: 48/2: 62-65, March 2007.

SHELTER-IN-PLACE ISSUE SETS

APPENDIX TO:

WITH THE PUBLIC'S KNOWLEDGE, WE CAN MAKE SHELTERING IN PLACE POSSIBLE

ISSUE SET FOR HOUSEHOLDSPage A3

ISSUE SET FOR WORK PLACESPage A9
*(Designed for places where people work and others may shop, receive services,
volunteer, study, pray, or be entertained)*

ISSUE SET FOR SCHOOLS AND
EARLY CHILDHOOD/YOUTH PROGRAMSPage A15
(Designed for places where dependent children go on a regular basis)

ISSUE SET FOR GOVERNMENTSPage A23
(Designed for government agencies and policy makers at multiple levels)

The four types of issue sets are available individually, with distinct illustrated covers, at www.redefiningreadiness.net

PREPARING TO SHELTER IN PLACE

ISSUES FOR HOUSEHOLDS TO CONSIDER

Sheltering in place means staying inside whatever building you happen to be in at the time of an emergency or, if you are outside, going into an undamaged building nearby and staying there for a period that may last hours to several days. Officials are likely to instruct people to shelter in place if an explosion or chemical spill releases toxic dust, fumes, radiation, or chemicals outside. Community residents may want to protect themselves this way if an emergency like an electrical blackout or snowstorm makes it very difficult or unsafe for them to go anywhere else. Depending on when the emergency occurs, some people are likely to be in a place other than their home – for example, at work, school, or shopping – apart from other household members.

When almost 2,000 diverse community residents in the *Redefining Readiness* demonstration sites considered what they would face in a shelter-in-place emergency, they identified many issues that are critical to their protection. If the members of *your* household want to be prepared to protect yourselves in this kind of emergency, get together with other household members to consider the questions below. These questions are designed to stimulate thinking about important issues, some of which you may not have considered before. There are many right answers, but don't expect to have answers right away. Instead, as you consider the questions together, decide which issues are relevant to your particular household and how the members of your household can best address them.

If you are employed or have young children in your household, take a look at *Issues for Work Places to Consider* and *Issues for Schools and Early Childhood/Youth Programs to Consider* too, and get involved in discussions in those places.

For more information about the problems people face trying to shelter in place, examples of specific actions that can be taken to resolve those problems, and an inclusive process for using this issue set, please visit www.redefiningreadiness.net.

I. OUR HOUSEHOLD'S NEED TO SHELTER IN PLACE

- (1) **What kinds of emergencies could occur in *our community* that would make us need to protect ourselves by sheltering in place?**
- (2) **Considering the places we go on a regular basis, where might each of us need to shelter in this kind of emergency?**
- (3) **Are any of us responsible for protecting other people in our work place in a shelter-in-place emergency?**
 - If so, do we know what is expected of us?
 - Have we received any training to meet these responsibilities?

II. COMMUNICATION

- (1) **If we are at home, how will we know about the emergency and communicate with others?**
 - What media and communication devices do we have at home?
 - Do we have back-ups if some forms of communication are not operational during the emergency?
 - Are we part of a “calling tree,” such as a group of trusted neighbors or friends who call or e-mail each other during an emergency?
- (2) **How will we receive information and communicate with others if we are *not* at home at the time of the emergency?**
 - What communication devices do we carry with us or have at work?
 - How will we communicate with household members who do not carry such devices?
- (3) **If the members of our household can't communicate with each other during the emergency, is there another way we can find out how all of us are?**
 - Do we have a list of other people that each of us should call or e-mail?
 - Does the community have a hot-line or website we can contact to report our condition and check on the condition of other household members during the emergency?

III. PROTECTION FROM TOXIC SUBSTANCES OUTSIDE

- (1) **Have we discussed this type of emergency in advance to make sure that everyone in our household will take shelter wherever they happen to be (in other words, not endanger themselves by trying to find each other or by going to a pre-arranged meeting place)?**
- (2) **If we are at home during the emergency, what will we do to protect ourselves from toxic substances outside?**
 - Does everyone in our household know how to close or seal windows, doors, and vents; and to turn off air conditioners?
 - Which room in the house will give us the best protection from toxic substances outside?
 - If we stay in this room, will we have access to communications, toilet and washing facilities, and critical basic and medical supplies?
- (3) **How will we be protected from toxic substances outside if we are some place else at the time of the emergency, such as at work, school, day care, shopping, or in a restaurant?**
- (4) **Where will we go to protect ourselves if we are outside at the time of the emergency?**

IV. BASIC AND MEDICAL NEEDS

- (1) **If we are home during the emergency, will we have enough supplies there to meet our basic and medical needs for several days?**
 - Do these supplies need to include medications and medical supplies; bottled water and non-perishable food; hygiene, cleaning, and plumbing products; flashlights, candles, and matches; communications?
 - Do we need any other supplies?
- (2) **If we are some place else during the emergency (for example, at work, school, day care, shopping), do we know what that place will do to meet our basic and medical needs during a shelter-in-place emergency?**

- (3) Have we stored emergency supplies in the other places we tend to be on a regular basis (such as at work, school, day care, or in the car)?**
- Do our personal emergency kits need to include a several-day supply of all of the medications and medical supplies we need (including nicotine gum if we smoke)?
 - Do our personal emergency kits need to contain food for special dietary needs (including instant tea or coffee if we need caffeine), personal hygiene products, eyeglasses or contact lens supplies, extra clothes, a sewing kit, towels, a blanket and pillow, and books or other entertainment?
 - Do the emergency kits for our children also need to include a comfort toy or blanket, something to keep them occupied, and things they need to go to sleep?
 - Do we need to include anything else in our personal emergency kits?
- (4) If we have children at school, day care, or another youth program, have we provided that organization with:**
- A record of each child's medical problems, allergies, and medications?
 - Written permission to administer medications to each of our children in the event of an emergency?
- (5) To meet our medical needs if we are not at home, work, school, or day care during the emergency, do all of us need to keep a three-day supply of our medications and medical supplies with us at all times?**

V. CARE FOR DEPENDENTS

- (1) Have we arranged alternate providers of care for the children, adults, and animals who depend on us – with multiple back-ups so we can be sure that our own caretaker responsibilities will be fulfilled if we have to shelter in place during this kind of emergency?**
- Have we given our children's school, day care, or youth program a list of all of the people who are authorized to pick them up?
 - Does our neighborhood have a "safe house" where children who are home alone can go during an emergency?
 - Has our neighborhood organized a buddy system or teams to check on dependents who may be home alone during an emergency?
 - Do our children and other dependents know about these alternate care plans?

(2) Have we talked to our children's school, day care, youth program, or sitter about how our children will be cared for if we need to shelter in place during the emergency?

- If someone we authorize picks up our children, will the school or program keep a record of who picked them up, when they were picked up, and where they were taken?
- If neither we nor any of our authorized back-ups can pick up our children or meet them at home during the emergency, what will the school, day care, bus driver, or sitter do to assure our children's supervision and safety?
- Have we provided the people we employ to care for our children or other dependents with any incentives to continue caring for them in this kind of situation? If so, what will happen to *their* dependents?

(3) Do our children and other dependents know what to do if they are home alone during the emergency?

- Do they know how to use the phone and whom to call for assistance?
- If they are disabled, do they have a personal alarm system to call for help?
- Until help arrives, do they know the safest place in the house to go? Does that room have all of the supplies they will need? Are they able to use those supplies?

VI. EMOTIONAL DISTRESS AND VIOLENCE

(1) Have we taken steps in advance to reduce the emotional stress we could experience in a shelter-in-place emergency?

- Has everyone in our household had an opportunity to think about this kind of emergency in advance?
- Have we figured out ways to communicate with each other or find out about each other during the emergency?
- Have we included comfort and entertainment items in our personal emergency kits?
- Have we made arrangements for all of our dependents to be cared for during the emergency?
- Are we confident that our household members' work places, schools, day care centers, and after-school programs have prepared to minimize

conditions that can make people unruly and violent when they are sheltering in place (such as insufficient food, water, medications, and hygiene facilities; overcrowding; extreme temperatures; access to weapons and alcohol; and locked doors)?

- Have we talked with our employers to be sure that we won't lose our job or income and that our critical job responsibilities will be fulfilled if we can't get to work because we are sheltering somewhere else during the emergency?
 - Have we installed alarm systems in our homes and businesses or organized a neighborhood watch to protect our property if we need to shelter somewhere else?
 - Would it be helpful to learn relaxation techniques or self-defense?
- (2) **Have we thought about what we could do to help ourselves and other people in the building stay calm during a shelter-in-place emergency** (such as keeping each other occupied and entertained, organizing a buddy system so people in the building can support each other and watch over each other while they sleep, and helping people keep their minds off their fears by finding useful tasks for them to do)?

VII. EMERGENCY PLANNING PROCESS

- (1) **Who has been involved in developing our household's plans to respond to a shelter-in-place emergency?**
- What role has each member of our household played?
 - What aspects of the plan is each household member aware of and how have they been informed?
 - How have we practiced our plans and determined how effective they are?
 - How often do we review our plans and modify them, if necessary?
- (2) **What role have we played in developing shelter-in-place plans at our household members' work places, schools, day care centers, and after-school programs?**
- How much do we know about these plans?
 - Do we have any concerns or questions about these plans?
- (3) **What kinds of supports or incentives would help our household prepare for sheltering in place?**

PREPARING TO SHELTER IN PLACE

ISSUES FOR WORK PLACES TO CONSIDER

Sheltering in place means staying inside whatever building you happen to be in at the time of an emergency or, if you are outside, going into an undamaged building nearby and staying there for a period that may last hours to several days. Officials are likely to instruct people to shelter in place if an explosion or chemical spill releases toxic dust, fumes, radiation, or chemicals outside. Community residents may want to protect themselves this way if an emergency like an electrical blackout or snowstorm makes it very difficult or unsafe for them to go anywhere else. Depending on when the emergency occurs, some people are likely to be in a place other than their home – for example, at work, school, or shopping – apart from other household members.

When almost 2,000 diverse community residents in the *Redefining Readiness* demonstration sites considered what they would face in a shelter-in-place emergency, they identified many issues that are critical to their protection. If you want *your* work place to be prepared to deal with this kind of emergency, get together with other people there to consider the questions below. These questions are designed to stimulate thinking about important issues, some of which you may not have considered before. There are many right answers, but don't expect to have answers right away. Instead, as you consider the questions together, decide which issues are relevant to your particular work place and how your work place can best address them.

If you want your household and the places your children go on a regular basis to be prepared, take a look at *Issues for Households to Consider* and *Issues for Schools and Early Childhood/Youth Programs to Consider* too.

For more information about the problems people face trying to shelter in place, examples of specific actions that can be taken to resolve those problems, and an inclusive process for using this issue set, please visit www.redefiningreadiness.net.

I. RESPONSIBILITY FOR PROVIDING SHELTER

- (1) **Who is the work place responsible for protecting in a shelter-in-place emergency?**
 - Does this group include employees who work in the building?
 - If the work site is a public place, does this group also include customers, clients, students, patients, or visitors?
 - Are dependent children in the work place on a regular basis? If so, you may also want to review *Issues for Schools and Early Childhood/Youth Programs to Consider*.
- (2) **What is the maximum number of people who could be inside the work place at the time of an emergency?**
- (3) **Under what circumstances will employees and other people inside be *instructed* to protect themselves by sheltering inside the work place building?**
- (4) **Under what circumstances will employees and other people inside be given the *option* to protect themselves by sheltering in the work place building?**
- (5) **Does the work place employ anyone who works outside?**
 - In the event of an emergency, is the work place responsible for providing shelter for these employees?

II. COMMUNICATION

- (1) **How will the people sheltering in the building communicate with the outside world during the emergency?**
 - If some forms of communication are not operational during the emergency, does the work place have back-up ways to receive and send information?
- (2) **How will information about the emergency be transmitted to employees and the other people inside?**
 - Do current strategies communicate effectively with everyone, including people who are hearing impaired or don't speak English?
 - Do current strategies clearly distinguish emergencies in which people need to shelter in place from emergencies in which people need to evacuate the building?

- (3) **Do employees in the field have two-way communication devices so they can be informed of the emergency and call for instructions or help?**
- (4) **Does the community have a hot-line or website that the work place can contact to report the condition of the building and the people inside during an emergency?**
 - Do relatives and friends of employees have access to this information so they can find out how their loved ones are?

III. PROTECTION FROM TOXIC SUBSTANCES OUTSIDE

- (1) **What actions will be taken to prevent toxic substances from coming into the building?**
 - How many employees know how to close or seal windows, doors, and vents; to disable automatic doors; and to turn off air conditioners?
 - Are instructions for carrying out these tasks readily available so other employees could do them, too?
- (2) **Which room(s) in the building will provide the best protection from toxic substances outside?**
 - Are these “safe” rooms large enough to accommodate *everyone* who is likely to be inside at the time?
 - Will the people in these rooms have safe access to communications, toilet and washing facilities, and critical basic and medical supplies?
 - Will people in the safe rooms have enough space to move around and lie down?
 - How will the temperature be controlled at tolerable levels if the vents and windows are closed?
- (3) **Will people be allowed to enter or leave the building?**
 - What is the basis for this decision?
 - Is there a way for people to enter and leave without exposing the people already inside to dangerous amounts of the toxic substances outside?

IV. BASIC AND MEDICAL NEEDS

- (1) **Does the work place have supplies on hand to meet the basic needs of *everyone* who is likely to be inside at the time of a shelter-in-place emergency?**
 - Do these supplies need to include water, food, and utensils; hygiene, cleaning, and plumbing products; blankets, mats, or sleeping bags; flashlights, candles, matches, and tools; communications, fans and heaters; a generator; and protective clothing?
 - Are other basic supplies needed?
 - Are supplies sufficient to meet everyone's needs for several days?
- (2) **Does the work place need to have an adequate supply of emergency and commonly used medications, emergency and first-aid supplies, and a refrigerator to store perishable medications?**
 - How many employees are authorized to provide medical assistance?
- (3) **Have employees been encouraged to store their own emergency supplies at work?**
 - Do their personal emergency kits need to include a several-day supply of the medications and medical supplies they need?
 - Do their personal emergency kits also need to include food for special dietary needs, personal hygiene products, eyeglasses or contact lens supplies, extra clothes, a sewing kit, towels, a blanket and pillow, and books or other entertainment?
 - Do employees need to store other emergency supplies?
- (4) **Will all of these basic and medical supplies – stored by employees and the work place – be accessible to the people sheltering in the safe room(s)?**
- (5) **Does the work place have procedures for distributing supplies equitably in the event of a shelter-in-place emergency?**
 - Do these procedures assure that people with medical conditions like diabetes will receive the food they need when they need it?

V. EMOTIONAL DISTRESS AND VIOLENCE

(1) How will the work place help employees and the other people inside cope with emotional distress during a shelter-in-place emergency?

- Have employees been given an opportunity to think about these situations in advance?
- Have they been encouraged to make arrangements to assure that the people and animals they care about will be safe if they can't get to them because they need to shelter in the work place?
- If their own phones don't work during the emergency, have arrangements been made to enable employees and other people communicate with loved ones who are not in the building?
- Does the work place have a system to give employees and other people useful tasks to do during the emergency?

(2) How will the work place prevent unruly and violent behavior during a shelter-in-place emergency?

- Have the people who will be responsible for security been trained to keep themselves and others calm?
- Has the work place prepared to minimize building conditions that can make people sheltering in place unruly or violent (such as insufficient food, water, medications, and hygiene facilities; overcrowding; and extreme temperatures)?
- Does the work place have a system to limit people's access to weapons and alcohol?

(3) Does the work place have an alternative to locking the doors during the emergency?

VI. EMPLOYEE RESPONSIBILITIES, INCENTIVES, AND SUPPORTS

(1) What is expected of various employees during this kind of emergency, and what training have they received to meet their responsibilities?

(2) Does the work place provide any employees with bonuses or other incentives for staying on the job during an emergency?

(3) What if critical employees leave or don't show up?

- Does the work place have back-ups for the people in charge as well as everyone else who will be playing important roles during the emergency?

- Is important information about the building readily available so other people who may need to take over will know where things are and what to do?
- Does the work place have policies to protect employees' jobs and income if they can't get to work because they are sheltering somewhere else during the emergency?

VII. EMERGENCY PLANNING PROCESS

- (1) Who has been involved in developing the work site's plans to respond to a shelter-in-place emergency?**
 - What has been the role of employees who work in the building?
 - Has the process involved anyone else who is in the work place on a regular basis (such as customers or clients)?
 - What has been the role of employees who work outside?
- (2) Who is aware of the work site's shelter-in-place plans and how have they been informed?**
 - What do employees and the members of their households know?
 - What do other people who are in the work place on a regular basis know?
- (3) How has the work place practiced its plans and evaluated the effectiveness of its plans?**
- (4) How often does the work place review and modify its plans?**
- (5) What kinds of incentives or supports would help the work place prepare for sheltering in place?**

PREPARING TO SHELTER IN PLACE

ISSUES FOR SCHOOLS AND EARLY CHILDHOOD/YOUTH PROGRAMS TO CONSIDER

Sheltering in place means staying inside whatever building you happen to be in at the time of an emergency or, if you are outside, going into an undamaged building nearby and staying there for a period that may last hours to several days. Officials are likely to instruct people to shelter in place if an explosion or chemical spill releases toxic dust, fumes, radiation, or chemicals outside. Community residents may want to protect themselves this way if an emergency like an electrical blackout or snowstorm makes it very difficult or unsafe for them to go anywhere else. Depending on when the emergency occurs, some people are likely to be in a place other than their home – for example, at work, school, or shopping – apart from other household members.

When almost 2,000 diverse community residents in the *Redefining Readiness* demonstration sites considered what they would face in a shelter-in-place emergency, they identified many issues that are critical to their protection. If you want the school or early childhood/youth program that *your* child attends – or the school or program where *you* work – to be prepared to protect children in this kind of emergency, get together with other people there to consider the questions below. These questions are designed to stimulate thinking about important issues, some of which you may not have considered before. There are many right answers, but don't expect to have answers right away. Instead, as you consider the questions together, decide which issues are relevant to your particular school or program and how your school or program can best address them.

If you also want your household and work place to be prepared, take a look at *Issues for Households to Consider* and *Issues for Work Places to Consider* too.

For more information about the problems people face trying to shelter in place, examples of specific actions that can be taken to resolve those problems, and an inclusive process for using this issue set, please visit www.redefiningreadiness.net.

I. RESPONSIBILITY FOR PROVIDING SHELTER

- (1) Who is the school/program responsible for protecting in a shelter-in-place emergency?**
 - Does this group include children and staff?
 - Does this group include other people who use or visit the school/program building?
 - Does this group include children or adults for whom the school/program building is a designated shelter?
- (2) Under what circumstances will the school/program instruct children and staff to shelter in the building or offer them the option to do so?**
- (3) Under what circumstances will parents or other authorized adults be allowed to pick up their children from school/program during a shelter-in-place emergency?**
 - Will they be allowed to do so if the school/program is in the danger zone where toxic substances are outside?
 - Will they be allowed to do so if other areas of the community are in the danger zone, but the school/program building is not?
- (4) What is the school/program's responsibility to children if the building is not directly in the danger zone?**
 - If an authorized adult other than a parent picks up a child during the emergency, will the school/program keep a record of who picked up the child, when the child was picked up, and where the child was taken?
 - If the emergency prevents all authorized adults from picking up a child, how will the school/program assure the child's safety?
 - How will the school/program make sure that children won't be let off a school bus unless a responsible adult is available to take care of them?

II. COMMUNICATION

- (1) How will the school/program communicate with the outside world during the emergency?**
 - If some forms of communication are not operational during the emergency, does the school/program have back-up ways to receive and send information?

(2) How will information about the emergency be transmitted to the people inside the school/program building?

- Do current strategies communicate effectively with everyone, including people who are hearing impaired or don't speak English?
- Do current strategies clearly distinguish emergencies in which people need to shelter in place from emergencies in which people need to evacuate the building?

(3) How will children and staff outside the school/program building (for example, in a playground or sports field) be notified of the emergency?

(4) What provisions have been made to enable children to communicate with their parents during the emergency?

(5) Do all school bus drivers have two-way communication devices so they can be informed of the emergency and call for instructions or help?

(6) Does the community have a hot-line or website that the school/program can contact to report the condition of the building and the people inside?

- Do parents in the community have access to this information so they can find out how their children are?
- Do relatives and friends of school/program staff have access to this information so they can find out how their loved ones are?

III. PROTECTION FROM TOXIC SUBSTANCES OUTSIDE

(1) If the school/program is in the danger zone, what actions will be taken to prevent toxic substances from coming into the building?

- How many staff know how to close or seal windows, doors, and vents; to disable automatic doors; and to turn off air conditioners?
- Are instructions for carrying out these tasks readily available so other staff could do them, too?

(2) What room(s) in the school/program will provide the best protection from toxic substances outside?

- Are these "safe" rooms large enough to accommodate *everyone* in the school/program, with enough space for people to move around and lie down?

- Will the children and staff in these rooms have safe access to communications, toilet and washing facilities, and critical basic and medical supplies?
- How will the temperature be controlled at tolerable levels if the vents and windows are closed?

(3) Will the school/program be in a “lockdown”?

- If so, what will be done to protect children and staff outside who are exposed to toxic substances?
- If not, has the school/program identified a way for people to enter and leave the building without exposing those already inside to dangerous amounts of toxic substances?

IV. BASIC AND MEDICAL NEEDS

(1) Does the school/program have supplies on hand to meet the basic needs of *everyone* who is likely to be inside at the time of a shelter-in-place emergency?

- Do these supplies need to include water, food, and utensils; hygiene, cleaning, and plumbing products; blankets, mats, or sleeping bags; flashlights, candles, matches, and tools; communications, fans and heaters, a generator; protective clothing?
- Are other basic supplies needed?
- Are supplies sufficient to meet everyone’s needs for several days?

(2) Does the school/program need to have an adequate supply of emergency and commonly used medications, emergency and first-aid supplies, and a refrigerator to store perishable medications?

- How many school/program staff are authorized to provide medical assistance and administer medications?

(3) Have parents been encouraged to bring emergency supplies for their children to be stored at the school/program?

- Do these emergency kits need to include a several-day supply of the medications and medical supplies that the child needs?
- Do these emergency kits need to include food for special dietary needs, a toothbrush and toothpaste, a change of clothes, something to keep the child entertained and occupied, a comfort toy or blanket, and things the child needs to go to sleep?

- Do parents need to store other emergency supplies for their children at the school/program?
- (4) Have parents been encouraged to provide the school/program with:**
- A record of their children’s medical problems, allergies, and medications?
 - Written permission to administer medications to their children in the event of an emergency?
- (5) Have school/program staff been encouraged to store their own emergency supplies at work?**
- Do their personal emergency kits need to include a several-day supply of the medications and medical supplies they need?
 - Do their personal emergency kits also need to include food for special dietary needs, personal hygiene products, eyeglasses or contact lens supplies, extra clothes, a sewing kit, towels, a blanket and pillow, and books or other entertainment?
 - Do staff need to store other emergency supplies?
- (6) Will all of these basic and medical supplies – provided by parents, staff, and the school/program – be accessible to the people sheltering in the safe room(s)?**
- (7) Does the school/program have procedures for distributing supplies equitably in the event of a shelter-in-place emergency?**
- Do these procedures assure that children and staff with medical conditions like diabetes will receive the food they need when they need it?

V. EMOTIONAL DISTRESS AND VIOLENCE

- (1) What has been done to help staff and children in the school/program cope with emotional distress during a shelter-in-place emergency?**
- Have staff members been given an opportunity to think about these situations in advance?
 - Have they been encouraged to make arrangements to assure that the people and animals they care about will be safe if they can’t get to them because they need to shelter in the school/program building?
 - If personal phones don’t work during the emergency, have arrangements been made to enable staff and children to communicate with loved ones who are not with them in the building?

- Have teachers and other staff been trained to help the children in their care deal with the stress of an emergency?
- (2) **How will the school/program prevent unruly and violent behavior during a shelter-in-place emergency?**
- Who will be responsible for security?
 - Have they and other staff been trained to keep children and adults calm?
 - Has the school/program prepared to minimize building conditions that can make people sheltering in place unruly or violent (such as insufficient food, water, medications, and hygiene facilities; overcrowding; and extreme temperatures)?
- (3) **Will a “lockdown” policy reduce or provoke unruly and violent behavior during a shelter-in-place emergency?**
- Does the school or program have an alternative to locking the doors during this kind of emergency?

VI. STAFF RESPONSIBILITIES, INCENTIVES, AND SUPPORTS

- (1) **What is expected of school/program staff during a shelter-in-place emergency and what training have they received to meet their responsibilities?**
- (2) **Does the school/program provide any staff with bonuses or other incentives for staying on the job during an emergency?**
- (3) **What if critical staff leave or don't show up?**
- Does the school/program have back-ups for the people in charge as well as everyone else who will be playing important roles during the emergency?
 - Is important information about the building readily available so that other people who may need to take over will know where things are and what to do?
 - Does the school/program have policies to protect staff members' jobs and income if they can't get to work because they are sheltering somewhere else during the emergency?

VII. EMERGENCY PLANNING PROCESS

- (1) Who has been involved in developing the school/program's plans to respond to a shelter-in-place emergency?**
 - What has been the role of teachers, other staff, parents, and children?
 - What has been the role of other people who use or visit the building on a regular basis?
- (2) Who is aware of the school/program's plans and how have they been informed?**
 - What do staff and the members of their households know?
 - What do parents and children know?
 - What do other people who use the building on a regular basis know?
- (3) How has the school/program practiced its plans and evaluated the effectiveness of its plans?**
- (4) How often does the school/program review and modify its plans?**
- (5) What kinds of incentives or supports would help the school/program prepare for sheltering in place?**

PREPARING TO SHELTER IN PLACE

ISSUES FOR GOVERNMENTS TO CONSIDER

Sheltering in place means staying inside whatever building you happen to be in at the time of an emergency or, if you are outside, going into an undamaged building nearby and staying there for a period that may last hours to several days. Officials are likely to instruct people to shelter in place if an explosion or chemical spill releases toxic dust, fumes, radiation, or chemicals outside. Community residents may want to protect themselves this way if an emergency like an electrical blackout or snowstorm makes it very difficult or unsafe for them to go anywhere else. Depending on when the emergency occurs, some people are likely to be in a place other than their home – for example, at work, school, or shopping – apart from other household members.

When almost 2,000 diverse community residents in the *Redefining Readiness* demonstration sites considered what they would face in a shelter-in-place emergency, they identified many issues that are critical to their protection. While most of the issues relate to individuals and private-sector organizations in communities, policy makers and government agencies also have important roles to play. The questions below are designed to stimulate thinking about ways that local, state, and federal governments can support the efforts of community residents and nongovernmental organizations to prepare effectively for shelter-in-place emergencies. There are many right answers, but don't expect to have answers right away. Instead, as you consider the questions with other policy makers or with the other people in your agency, decide which questions are relevant to your particular arm of government and how you can best address them.

If you also want your government-run work place or school to be prepared, take a look at *Issues for Work Places to Consider* and *Issues for Schools and Early Childhood/Youth Programs to Consider* too.

For more information about the problems people face trying to shelter in place, examples of specific actions that can be taken to resolve those problems, and an inclusive process for using this issue set, please visit www.redefiningreadiness.net.

I. DECLARATION OF A SHELTER-IN-PLACE EMERGENCY

(I) Under what circumstances will government officials instruct residents to protect themselves by sheltering in place?

- What are the specific emergency situations that will trigger this kind of instruction?
- Will instructions vary for people in different locations in the community? If so, on what basis and how?

II. RESPONSIBILITY FOR GOVERNMENT WORKERS AND PEOPLE IN GOVERNMENT BUILDINGS

(1) Have government workers and other people who use government buildings been involved in preparing to keep people safe in those places in a shelter-in-place emergency?

- Have *Issues for Work Places to Consider* and *Issues for Schools and Early Childhood/Youth Programs to Consider* been discussed and addressed in government-run work places and schools?

III. PUBLIC COMMUNICATION

(1) How will the public be informed about a shelter-in-place emergency?

- Do current methods communicate effectively with all of the places where people will be?
- Do current methods communicate effectively with people who don't speak English and people who are hearing impaired, in places without radio or TV, outside, on the road, or in isolated areas?
- Do current methods clearly distinguish the need to shelter in place from the need to evacuate?
- Are effective back-ups available if some forms of communication are not operational during the emergency?

(2) How will community residents find out how their loved ones are and where they are during a shelter-in-place emergency?

- What is the role of government in assuring telephone and e-mail communication for the general public during a large-scale emergency?

- Is there current capacity in the community for a telephone/Internet hot-line that work sites, shops, schools, and other places could contact to report the condition of their building and the people inside during the emergency and that community members could contact to get information about their loved ones in languages they understand?
- If that capacity does not exist, does the government need to support such an effort?

IV. PUBLIC INCENTIVES, SUPPORTS, AND PROTECTIONS

(1) What is the role of government in assuring that work places, schools, businesses, and other places have prepared to shelter the people inside during this kind of emergency?

- What kinds of incentives and supports do different kinds of places need to prepare for sheltering in place?
- What kinds of incentives and supports will promote an inclusive preparedness process (in other words, a process that involves – and addresses the issues of – the people who work at the place, who go there on a regular basis, and whose dependents go there on a regular basis)?
- What can be done to make community residents aware of how public places will respond to a shelter-in-place emergency?

(2) What is the role of government in providing shelter for people who are outside in a dangerous area in this kind of emergency?

- Do public shelters need to be prepared where people outside can go?
- Do emergency workers need to be prepared to rescue people outside and take them to shelter?

(3) What is the role of government in assuring the safety of buildings where people would be sheltering in this kind of emergency?

- To minimize the seepage of toxic substances into buildings, should the windows, doors, walls, and ceilings of buildings be inspected to see if they are air-tight?
- Should the government develop standards for external seepage and include these standards in building codes?
- Should the government publicize criteria for determining if a building is in danger of collapsing as a result of an emergency?

- (4) What is the role of government in organizing a system of medical consultation and support for people sheltering in buildings?**
- Will medical professionals (including mental health professionals) be available by telephone, Internet, or CB radio to help sheltering people deal with medical emergencies?
 - How will critically needed medications and supplies be delivered safely to people sheltering in buildings, and how will critically ill people be evacuated safely from buildings?
- (5) What preparations have been made to patrol the streets in uncontaminated areas to prevent break-ins during this kind of emergency?**
- What can be done to make people in all neighborhoods aware of these preparations?
- (6) What is the role of government in partnering with community organizations and groups to respond to a shelter-in-place emergency?**
- Which organizations and groups is the government partnering with now?
 - How can the government determine if other organizations and groups in the community are interested in being involved and what they might contribute?
 - What is the role of government in protecting organizations and groups from liability when they provide emergency assistance to community residents?
- (7) What is the role of government in assuring adequate compensation for losses incurred during this kind of emergency?**

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