

NATIONAL PREPAREDNESS PLANNING: THE HISTORICAL CONTEXT AND CURRENT STATE OF THE U.S. PUBLIC'S READINESS, 1940-2005

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In the United States, national public preparedness efforts meant to ready individuals and families for disasters have been driven primarily by international threats, actual or anticipated. These include terrorism, war and the potential for global instability such as the millennium Y2K computer error. The national dialogue on public preparedness following Hurricanes Katrina and Rita in the fall of 2005 is a notable departure from the more typical focus of public preparedness, which is oriented toward terrorism and international threats. However, the response to the hurricanes was largely viewed as an unanticipated test of the public's readiness for a disaster and the penetration of the public preparedness messages that have been actively promulgated since 11 September 2001. As such, we argue that the poor state of public readiness that was found in the U.S. Gulf Coast region after the hurricanes actually reflects a national state of unpreparedness for emergency events despite the post-September 11th calls from all levels of government for the U.S. public to be prepared.¹

Since 11 September 2001, a renewed national focus on the U.S. public's readiness for international aggression emerged. This focus was heightened by the anthrax mailings shortly after September 11th and the alleged threat of an Iraqi attack using unconventional weapons, specifically smallpox, on the U.S. homeland. The post-September 11th focus on national public preparedness came almost two years after calls had ended for the public to prepare for the millennium Y2K computer error and its potential to disrupt everything from alarm clocks to the power supply. Prior to the millennium, the national public had engaged in a preparedness dialogue born during the Second World War amid calls for the public to engage in air raid and naval watches that continued throughout the Cold War and its threat of nuclear attacks. The post-September 11th national public preparedness dialogue reignited a

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theme in government-public communications that has existed since the years leading up to the Second World War: government calls for the public to prepare for doomsday scenarios arising from an international threat.

It is important to distinguish between nationally led calls to prepare centered on international threats versus regional preparedness endeavors based on local natural or emergency weather events, such as earthquake drills in California or tornado shelter constructions in the Midwest. Taken as a whole, the period of 1940 to the present represents what can be viewed as a *federal* government-public preparedness dialogue born out of national security. This is unique from natural disaster preparedness efforts, which are typically led by state and local governments. Such efforts lack the heightened importance of a national call framed around an international threat

Regardless of the threat, the U.S. public has been unprepared.

in which the American way of life is perceived to be at stake if the nation—including the public—is insufficiently prepared. During this nearly continuous sixty-five year period—with a notable gap from the early 1980s, through the collapse of the Soviet Union, until the mid-1990s prior to the focus on the millennium Y2K threat—the dia-

logue has been led by federal agencies—some now defunct, like the Department of War—the succession of White House administrations, and a host of non-governmental organizations, most notably the American Red Cross. We find that regardless of the administration or context of the threat, the U.S. public has regarded itself as unprepared when called on by the federal government to take measures in response to or in anticipation of international threats. In other words, the failure of the U.S. public to be prepared for terrorism in 2005 bears little difference to the state of public preparedness during other periods in which national calls were issued. The same holds true, as it turns out, for public preparedness with respect to natural disasters.

We present data from our 2005 annual national survey, and the follow-up survey after Hurricanes Katrina and Rita, of the U.S. public's views on terrorism, preparedness and other topics germane to emergency events. Our first surveys took place in the months after September 11th, and we continued conducting them once every summer beginning in 2003. Findings from the 2005 surveys present a U.S. public confused about what “prepared” means, an unchanging and even declining engagement of the preparedness message and mixed perceptions as to who is in charge in various disaster scenarios. We compare the findings from these surveys with other national surveys conducted between 1940 and 2000, when, by and large, public preparedness became a national focus because of international threats. These key points for this comparison include the period prior to and during the Second World War, the height of the Cold War including the Cuban Missile Crisis and the millennium Y2K preparations. We consider the public preparedness data in the context of how the message is framed and the level of public belief that an attack will

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actually happen and will affect them. We suggest several factors that may determine the likelihood of the public to embrace a national preparedness message and conclude with a perspective on the importance of public preparedness.

METHODS

The National Center for Disaster Preparedness (NCDP) at Columbia University's Mailman School of Public Health annually conducts a nationwide survey of households in the United States. The surveys began in the immediate aftermath of 11 September 2001, with the first polls completed three and six months after and then annually each August beginning in 2003. The surveys are administered in the field by the Marist College Institute for Public Opinion in July and August, with the exception of the 2005 follow-up to the 2005 annual survey, which was administered in the field in October. Both of the 2005 surveys as well as prior years' surveys employ the same methodology: they have an approximate sample size of 1,200, a margin of error of roughly ± 3.0 and are at a 95 percent confidence interval. Each survey includes trended questions, as well as "one-off" questions appropriate to the given time period. Trended questions include confidence in the government and the health care system, willingness and ability to evacuate, personal and family preparedness plans, personal sacrifice, community preparedness, perceptions and engagement of all-hazard preparedness and other questions thematic to emergency preparedness and response. All questions are cross-tabulated with a variety of demographics including race, age, gender, income, region, size of community, political affiliation and education. Surveys are conducted in both English and Spanish.²

Telephone numbers are selected based upon a complete list of telephone exchanges from throughout the nation. The exchanges are selected to ensure that each census division is represented in proportion to its population. A national random digit dial (RDD) equal probability selection method (EPSEM) is used to draw the telephone numbers. This sampling design gives every telephone number within active telephone blocks in the contiguous forty-eight states and the District of Columbia an equal chance of being selected. The final sample is compared with data based on the 2000 U.S. Census to ensure the sample is representative in terms of geographic distribution, gender and race. To correct for any discrepancies between the final sample and the population estimates, the dataset is weighted in aggregate by census division and then balanced by 2000 U.S. Census population estimates for gender and race of adults eighteen years of age or older. The sample size is preserved throughout the weighting process.

The surveys observed from 1940 to 2000 are primarily from the Gallup Organization. Gallup polling arguably represents the most comprehensive, longest running and most methodologically sound surveys of the U.S. public. The Gallup questions on public preparedness during the Second World War and in the early

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years of the Cold War are unique in that they were the only questions of their type asked in national, trended public polls. As such, the questions are invaluable data points for understanding the U.S. public's engagement with the federal government's public preparedness agenda. While other organizations, notably the National Public Opinion Research Center (NORC) at the University of Chicago, have also administered surveys asking questions on public preparedness, the Gallup surveys incorporated public preparedness as a thematic category, giving a broader range of questions across more years than any other organization.

THE STATE OF THE U.S. PUBLIC'S READINESS: 2001-2005

If one regards preparedness as the public's readiness for an international threat, then the U.S. public is not prepared. This has been established in public polls and corroborated, if not confirmed, by the events of Hurricanes Katrina and Rita.³ The hurricanes, which were the first major test of the U.S. public's ability to respond to a disaster since a renewed focus on homeland security emerged after September 11th, revealed a regional population largely unprepared for a disaster, natural or otherwise. Our research shows that the failure of the public to prepare along the Gulf Coast is, in fact, a national problem. The region's failures to stock provisions or evacuate effectively, as well as its poor levels of awareness about community disaster plans, are found throughout the United States with little variation across region or size of community. In a sense, the hurricanes were an unanticipated test of the nation's preparedness for terrorist threats.

The central preparedness message from the federal government in the aftermath of September 11th and the run-up to the war in Iraq was for individuals and families to prepare for biological, chemical and radiological attacks and scenarios in which critical infrastructure, such as food supply systems and key transportation routes, could be disrupted.⁴ The preparedness messages have ranged from stocking practical supplies such as food, water and extra medications and forming family plans including meeting points and emergency phone numbers, to purchasing duct tape to seal windows in order to create a "safe room" in the event of a biological or chemical attack, to asking the public to go about their everyday routines.

In essence, the federal government's central message was to prepare for low probability, high consequence events. However, by the second anniversary of September 11th, there was low public attention to terrorism preparedness. While people believed terrorism was likely to occur in the United States in the near future, they also believed it was unlikely to affect them personally.⁵ This belief, coupled with the need to make preparedness practical for more frequent events such as regional weather emergencies, led to a refining of the national message toward "all-hazards preparedness."

All-hazards preparedness emphasizes that effective disaster planning allows individuals and families to literally be ready for "all hazards," from low probability

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events like terrorism to cyclical and periodic events like natural disasters and prolonged power failures.⁶ From a political standpoint, especially in the aftermath of Hurricanes Katrina and Rita, the shift from framing preparedness strictly as a practicality for terrorist events to all hazards was necessary. With the failure to find weapons of mass destruction in Iraq and the absence of further domestic terror attacks, holding public attention to prepare for terrorism was eroding.⁷ All-hazards preparedness has been most prominently championed by the Department of Homeland Security (DHS), its predecessor and current sub-agency, the Federal Emergency Management Agency (FEMA), Citizen Corps, also a division of DHS, and the American Red Cross (ARC). The all-hazards preparedness message is not new and in fact has been the mantra of FEMA since its inception during the Carter administration, yet it arguably had not received a sustained national platform until DHS and ARC began incorporating it as part of public terrorism readiness agendas post-September 11th.

The all-hazards approach to preparedness has failed to gain traction with the public.

Through DHS's Ready.Gov initiative for disaster preparedness, FEMA and Citizen Corps programs, the institution of a "National Preparedness Month" (September), campaigns by ARC and the America Prepared Campaign, U.S. public readiness was expected to increase. Each of these efforts was accompanied by a Web page with lists of emergency provisions that each family should stock and guides on how to form an emergency plan. Press releases were issued to highlight the availability of the materials and to direct the public to the Web sites while ads were taken out on buses in major cities. The America Prepared Campaign placed a three-page spread in the Sunday *New York Times* providing a checklist of materials and actions for families to undertake.⁸ In addition to national engagement efforts, state and local efforts—largely funded by DHS—echoed the national messages and also included the development of Web sites and media campaigns.⁹

Yet our research shows that the public is not prepared. Equally concerning, evidence suggests that the all-hazards approach has failed to gain traction with the public. Though Hurricanes Katrina and Rita were natural disasters, the prevalence of the all-hazards approach to public preparedness would allow one to conclude that the region's lack of readiness for a natural disaster would also mean that same population is even less likely to be prepared for a terrorist attack. Our data suggests that nationally, those prepared for a terrorist event are actually *fewer* than those who consider themselves as prepared for a natural disaster or emergency weather event. This calls into question the effectiveness of the all-hazards message as a means for engaging the public to prepare for an international threat.

It is worth considering what being prepared actually means for the public at

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large. While the notion of “prepared” has been subject to debate, basic benchmarks for individual and family preparedness can be broadly broken into three essential categories:¹⁰

1. Possession of resources such as food, water, medications, radio and other staples useful under evacuation or sheltering conditions;
2. Formation of family plans such as meeting points, phone numbers and other pre-established decisions when faced with uncertain reunification and contact; and
3. Knowledge of local and regional plans such evacuation routes, shelter locations and other variables under government mandate.

Our surveys indicate that the public is deficient in all of these criteria.¹¹

In the aftermath of Hurricanes Katrina and Rita, when asked if in general they felt personally prepared for a natural disaster or emergency weather event in their community, just over half (53 percent) of survey respondents described themselves as prepared. When asked about a terrorist attack in their community, only a third (35 percent) felt personally prepared. However, there is an important discrepancy between “self-identification as prepared” and having actually taken steps that translate into “actually being prepared.” Less than half (43 percent) reported having a family emergency preparedness plan that all members of the family knew about. Of those who reported having a plan, less than a third (31 percent) reported having all the major elements that are part of an emergency plan (i.e., two days food and water, a flashlight, a portable radio and spare batteries, emergency phone numbers and a meeting place). When we consider knowledge of local and regional plans, including evacuation plans, we find an uninformed public. Only a third (34 percent) reported being familiar with emergency or evacuation plans in their community in the event of a natural disaster or emergency event. When asked about a *terrorist attack*, less than a quarter (22 percent) reported being familiar with emergency or evacuation plans in their community. It is worth noting that having a family emergency preparedness strategy, yet lacking knowledge of community evacuation plans, is likely to diminish the effectiveness of even the best family plan. All of the above responses were unchanged or only slightly changed from just prior to Hurricane Katrina, suggesting that these events along with government and media messages on public preparedness have done little to stimulate individual and family readiness.

Despite the national dialogue on the topic that has emerged since Hurricanes Katrina and Rita, there has also been little change in the public’s views on evacuation in the event of a terror attack. As found before Hurricanes Katrina and Rita and unchanged after, in the event of a terror attack, over half (56 percent) of respondents said they would not obey orders to evacuate their home or office to go to a distant location if terrorist attacks occurred, either because they would not leave or because

Table 1: Personal and Family Preparedness and Awareness of Community Plans Pre- and Post-Hurricanes Katrina and Rita

QUESTION	OCTOBER 2005	JULY 2005
Do you personally feel very prepared, prepared, not very prepared, or not prepared at all for a natural disaster or emergency weather event in your community?	53% Very Prepared or Prepared	59% Very Prepared or Prepared
Do you personally feel very prepared, prepared, not very prepared, or not prepared at all for a terror attack in your community?	35% Very Prepared or Prepared	36% Very Prepared or Prepared
Do you have a family emergency plan that all family members know about?	45% Yes	43% Yes
Does your family emergency preparedness plan include all, some, or none of the following; at least two days food and water, a flashlight, a portable radio and spare batteries, emergency phone numbers and a meeting place for family members in case of evacuation?	31% All	30% All
In the event of a natural disaster or community event in your area, are you very familiar, familiar, not very familiar or not familiar at all with the emergency of evacuation plan in your community?	34% Very Familiar or Familiar	37% Very Familiar or Familiar
In the event of a terrorist event in your area, are you very familiar, familiar, not very familiar or not familiar at all with the emergency of evacuation plan in your community?	22% Very Familiar or Familiar	23% Very Familiar or Familiar

they would wait until concerns for children and loved ones were addressed. Over a quarter (29 percent) said they could not leave without help and nearly a third (30 percent) said they could not leave because they did not have transportation. Over a third (36 percent) said they would not leave if they lacked confidence in who ordered them to evacuate. While socioeconomic variables, notably access to transportation, may explain public disregard for evacuation, one cannot ignore the public's failure to make the appropriate contingency arrangements in the event of an evacuation, or to be aware of community evacuation plans, provided they exist.¹²

Lack of confidence in government officials further highlights the perplexity of why the public does not prepare for emergencies. According to the study, less than half of the U.S. public (49 percent) had confidence in the government to protect the area in which they live from a terrorist attack. This figure has steadily decreased, from 53 percent in 2004 and 64 percent in 2003. The U.S. public's expressed confidence in the government's ability to protect public transportation is also decreasing—only 37 percent reported themselves confident, down from 43 percent in 2004.

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Table 2: Evacuation Pre- and Post Hurricanes Katrina and Rita

QUESTION	OCTOBER 2005	JULY 2005
In the event of a terror attack, if you were ordered to evacuate your home or office and go to a distant location, would you leave immediately, wait until concerns about children or loved ones were addressed, or would you not leave?	56% Wait or Not Leave	57% Wait or Not Leave
In the event of a terror attack, if you were ordered to evacuate, thinking about your own circumstances, would any of the following keep you from leaving immediately: Not leave because you are unable to leave without help.	29% Yes	25% Yes
In the event of a terror attack, if you were ordered to evacuate, thinking about your own circumstances, would any of the following keep you from leaving immediately: Not leave because of your lack of confidence in who is ordering you to leave.	36% Yes	38% Yes
In the event of a terror attack, if you were ordered to evacuate, thinking about your own circumstances, would any of the following keep you from leaving immediately: Not leave because you do not have transportation.	30% Yes	26% Yes

Table 3: Who is Responsible for Community Preparedness?

QUESTION	OCTOBER 2005
Who is most responsible for ensuring communities are prepared for a terrorist attack?	38% Federal 31% Local 20% State 9% Individuals 2% Unsure
Who is most responsible for ensuring communities are prepared for a natural disaster of emergency weather event?	45% Local 23% State 17% Federal 12% Individuals 3% Unsure

Beyond the government, public confidence in the health care system's ability to respond effectively to a biological, chemical or nuclear attack is at 39 percent, unchanged from 2004 and down from 46 percent in 2003 and 53 percent in 2002.

These low levels of confidence are accompanied by confusion as to who is responsible for preparedness. Thirty-eight percent believed the federal government is most responsible for ensuring that communities are prepared for a terrorist attack, while nearly another third (31 percent) and a fifth (20 percent) believed the local and state government, respectively, are mainly responsible. However, when asked

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about natural disaster or emergency weather events, the responses are completely reversed. Nearly half (45 percent) believed local governments are most responsible for ensuring communities are prepared while nearly a quarter (23 percent) indicated state governments and less than a fifth (17 percent) indicated the federal government. With respect to what the highest national priority should be, the country is nearly evenly split between preparing for future acts of terror (36 percent) and preparing for an outbreak of disease and other medical crisis (35 percent). About a fifth (22 percent) said preparing for natural disasters and emergency weather events is the highest priority.

Should a stronger public engagement have been expected after September 11th? If we observe past periods of federal government-public preparedness dialogues when framed by international threats, it appears that the public disengagement that followed September 11th is actually the norm. However, there are few historical points that offer a suitable basis of comparison with which to gauge the relative level of the present public response. Perhaps the most salient analogy is the surprise attack on Pearl Harbor on 7 December 1941, the United States' subsequent entry into the Second World War, and the subsequent Cold War culture of imminent threat. Like Pearl Harbor and the events that followed, the attacks of September 11th were an unexpected international aggression that sparked the United States' entry into actual war (Iraq and Afghanistan) as well as a war of ideals (the War on Terror) in which the homeland was deemed to be under threat. As was the case during the Second World War and the Cold War, the federal government has called on the U.S. public to prepare themselves and their communities for a disaster brought by foreign attack. The millennium Y2K preparations, which came less than a decade after the Cold War ended, carried on the federal calls for public preparedness. While not driven by the threat of war or terrorism, these preparations bear many similarities to the calls to prepare for international threats such as September 11th and Pearl Harbor, with public preparedness framed as necessary to mitigate widespread infrastructure collapse, the potential for mass hysteria and the loss of government functions. Moreover, given the millennium's proximity to 11 September 2001, it offers an adjacent period of comparison to the present.

THE CONTEXT OF U.S. PUBLIC PREPAREDNESS: 1940-2000

In the face of international threats, the U.S. public has consistently reported itself as unprepared. This has been demonstrated despite perceived threats, attacks on the homeland and pronouncements from federal officials and agencies as to potentially imminent warfare or terrorist actions. From 1941 with the bombing of Pearl Harbor through the nuclear arms race and Cold War, to the present war on terrorism, the U.S. public has remained generally disinterested in the notion of personal disaster preparedness.

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On 10 December 1941, just after Pearl Harbor and at the onset of U.S. engagement in the Second World War, when asked if they knew where to go in the event of an air raid, only a third (35 percent) gave a correct answer with nearly six out of ten (58 percent) saying they had given the question no thought.¹³ Further, when asked if, outside of regular employment, the respondent was doing any work in civil defense programs such as air raid watches or first aid, just 9 percent said they were, while another 9 percent said they were not, but had signed up for something. Civil defense programs served as the primary means by which communities were sup-

The U.S. public has been disinterested in personal disaster preparedness.

posed to protect themselves from further Pearl Harbor-type attacks on the homeland.¹⁴ Despite aggressive campaigns for the public to join civil defense programs, by February of 1942, almost three months after Pearl Harbor and the entry of the United States into the war, just under a quarter (23 percent) of respondents participated in a civilian defense program, with another 10 percent saying they had not, but had signed up for one.¹⁵ Two years later, in 1943, when asked if they had had to make any “real sacrifice” for the war effort, only 2 percent said they had volunteered as air wardens, in civilian defense, or with the ARC.¹⁶ In other words, civil defense was not seen as a priority in the culture of national sacrifice that prevailed in civic life during the years of the Second World War.

It is worth acknowledging the difference between personal preparedness and national sacrifice, which are generally viewed as distinct. During the Second World War, the U.S. public cooperated with the federal government in unprecedented and since unreplicated ways. The public mostly accepted and supported the military draft, limitations on gasoline and food consumption and purchased bonds to help finance the war effort, actions that are all viewed as personal sacrifice toward a national effort. When asked in 1943—at about the midpoint of the war—whether the government had gone too far or not far enough in asking people to make sacrifices for the war, only 8 percent answered “too far” with 44 percent saying “not far enough.”¹⁷ Further, only 11 percent did not own war bonds or stamps and nearly three-quarters (73 percent) had either canned or grown at least some of their own vegetables. Yet personal and community preparedness remained insufficient throughout the Second World War, with civil defense and personal and family preparedness never reaching the levels of engagement and acceptance of rationing or the military or war industries drafts.

This trend of public unpreparedness continued into the Cold War. In 1953, participation in civil defense programs had fallen to 4 and 1/2 percent with only 3 percent saying they had not participated, but had signed up.¹⁸ When informed that civil defense officials said it would cost about \$200 to build a “reasonably safe air raid shelter,” just 2 percent said they were likely to build one in the next year. A year

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later in 1954, when asked about a hypothetical war with the Soviet Union and subsequent air raid alert in their town, just 6 1/2 percent of the public said they would follow instructions of civil defense wardens, with 4 percent saying they would report to civil defense duty.¹⁹ Nearly a fifth (19 percent) said they did not know what they would do or they would do nothing.

In 1960, with the nuclear arms race intensifying, only 11 percent of the public had done anything to prepare for a nuclear attack.²⁰ While nearly three-fourths (71 percent) favored a law requiring every community to build a public bomb shelter, less than a fifth (21 percent) had ever given thought to building a home bomb shelter. Further, when hypothetically asked if they would pay \$500 for a home bomb shelter, almost two-thirds (61 percent) said they would not have one built for themselves and their family. A year later in 1961, only 2 percent of the public said they had made any changes to their home to protect against a nuclear weapons attack.²¹ A month after asking the above question, Gallup asked it again with an emphasis on whether respondents *planned* to prepare their home for an attack. Despite tax breaks for home shelter construction and broad public awareness campaigns, just 12 percent said yes and 1 percent said they already had.²²

Public preparedness did not improve after the Cuban Missile Crisis.

By the Cuban Missile Crisis in 1962, just 4 percent of the U.S. public responded affirmatively when asked broadly if they had engaged in safety or survival related activities.²³ While the threat from Cuba and the tensions that followed dominated the U.S. public's concerns during and after the crisis—the event has been described as the closest the United States has come to a nuclear war—public preparedness did not improve. In 1963 despite a quarter (24 percent) of the public describing the danger of world war as the second most important problem facing the country (communism in the United States was first with 31 percent), only 2 percent said fallout shelters were the most important priority, with 41 percent—the highest of any choice—selecting it as the least important.²⁴ This was the case even with low levels of home shelter construction and awareness of public shelter location.

In the 1970s, despite U.S. combat operations in Vietnam, continued tension with the Soviet Union and ongoing federal government calls for the U.S. public to prepare for nuclear war, readiness did not improve. In 1976, when asked again about a proposed law that would require every newly built home in the United States to have a bomb shelter, with the federal government carrying the bulk of the costs, over half (55 percent) of respondents opposed the plan with 7 percent having no opinion.²⁵ The law's unpopularity was apparently not tied to a greater awareness of public bomb shelters. When asked, only a quarter (26 percent) knew where the nearest shelter was. Two years later, in 1978, that figure remained virtually unchanged (24 percent) and by 1981 it had dropped to 20 percent.²⁶ In 1981, support for the pro-

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posed law to require bomb shelter construction in all new homes, with most costs covered by federal monies, remained unchanged.²⁷ The law was never passed.

In the early 1980s, the disconnect in the federal government-public preparedness dialogue around public readiness for a nuclear attack was reduced to the concept of crisis relocation. In essence, the government assumed all planning for sustaining the public in the event of a nuclear attack, with the acceptance that most of

After the Cold War the government stopped discussing public preparedness.

the population would not survive. The plan was generally mocked in the media and within policymaking circles and gained little traction with the public in terms of both awareness and support.²⁸ When the Cold War ended in late 1980s and the threat of nuclear warfare subsided, the federal government

essentially stopped discussing public preparedness as a national endeavor. This was, for lack of any official declaration, apparently the result of a more stabilized international community and the absence of international terrorism as a, publicly discussed, domestic concern.

By the late 1990s, the millennium Y2K computer error emerged as the next calamity for which to prepare. As told, the error would result when computers—quite literally, any computer from a pacemaker to a mainframe overseeing a power grid—that were programmed to read the year as a two-digit field would malfunction as a result of the date rolling from “99” (short for “1999”) to “00,” which could be interpreted by the computer as 1900. The practice of abbreviating the year was so widespread that prognosticators, including media and government officials, warned the repercussions of a massive malfunction could be cataclysmic. Beyond fears of major computer malfunction, concern for terrorism was also high. In December 1998, 61 percent of the public felt a terrorist attack was likely—a figure unchanged one year later just prior to Millennium New Year’s Eve.²⁹

In response to the Y2K threat, President Clinton signed legislation to prepare the nation’s computer systems across critical industries (banking, power, etc.), FEMA developed citizen preparedness guides and the media extolled the public to prepare. Once again, despite declarations by the Clinton administration that this was a “global challenge,” and despite the potential for massive disruptions to everyday life, the public did not respond to the call to prepare.³⁰ With respect to terrorism, security was increased in both the run-up to the millennium and on the evening itself. Notably in the months before the millennium, the United States arrested members of an Islamic extremist group with plans to destroy the Seattle Space Needle on New Year’s Eve.

Even with the threat of global instability from the computer error and the known threat of terrorism, the public remained disengaged. In March 1999, when asked about a variety of actions they would or would not probably do to protect

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themselves against problems associated with the Y2K bug, the public remained generally disinterested.³¹ This included stockpiling food and water (60 percent said no), buying a generator or wood stove (75 percent said no) and withdrawing or setting aside a large amount of cash (70 percent said no). By August 1999, the numbers had stayed virtually the same or declined: 63 percent would not stockpile food or water, 85 percent would not buy a generator or wood stove and 74 percent would not withdraw or set aside cash.³² When asked generally if they had done anything to prepare for the millennium, over half (55 percent) said they had not.

UNDERSTANDING THE PREPAREDNESS DISCONNECT

Why the U.S. public has not engaged in personal preparedness when called on by the government to gird for international threats is perplexing. Other nations, notably Israel, have shown that high levels of public uptake are possible when the government calls for preparedness.³³ The U.S. public has in the past been receptive to federal government requests as seen during the Second World War with high levels of national sacrifice and, though hotly debated, the general acceptance of the military draft during the Vietnam War. So, what is it about personal and family preparedness in the face of war, terrorism and international destabilization that disengages the public no matter how much the federal government extols its virtues and provides incentives?

Of particular interest is the public attitude with respect to personal sacrifice versus preparedness. This phenomenon is not really well understood. Reasonable speculation might suggest that personal sacrifice, such as joining the military, has higher social value, reflecting positive actions or bravery during an actual crisis. Stockpiling canned foods and battery-operated radios may be perceived as significantly more passive, reflecting anxiety rather than bold action. Further study in this area would be helpful in understanding the factors that have historically constrained efforts to encourage public preparedness

While there are many possible reasons for poor public uptake, including how the message is constructed (notably, the current all-hazards strategy) and confidence in the government, another critical issue might be the degree to which citizens sense that an attack will actually affect them or their community. We found that while more than three-quarters (78 percent) of respondents were concerned that there will be more terror attacks in the United States, less than a third (31 percent) believed an attack would happen within a year. Likewise in New York City, which was actually attacked by international terrorists twice within the last thirteen years, more than three-quarters (76 percent) of New Yorkers were concerned that there will be more terror attacks, but less than a quarter (23 percent) believed an attack would happen within a year.³⁴ Thus, we see a population with a belief in future acts of terror, but a failure to see that threat as immediate. Gallup polling asked similar questions that

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provided consistent results. In a December 2005 survey, only 11 percent of respondents were very worried that they or someone in their family would be a victim of terrorism.³⁵ This figure was virtually unchanged from a survey exactly one year earlier (13 percent) and only slightly lower than immediately after 11 September 2001 (18 percent). Prior to September 11th, and as far back as 1995, concern never exceeded 14 percent (1995) and dropped to as low as 4 percent (2000).

These trends extend back to the Cold War and the Second World War. In 1941, immediately after Pearl Harbor, only a third (33 percent) believed there was “any chance” their city would be bombed.³⁶ Shifting the context from the intimacy of self-location to the broader issue of widespread war, at the onset of the Cold War, the public was asked about fears of a third world war. From 1951 to 1955, and fairly consistently, only about a fifth of the population believed a third world war would happen in the year following when the question was asked.³⁷ The notable exception was 1951 at 26 percent. Given the national prominence of nuclear tensions with the Soviet Union and combat operations in Korea, the number of people believing that a third world war was likely was relatively low.

Regarding public preparedness, if belief in the homeland threat is low, it is reasonable to understand the public’s disinterest in government calls to prepare. A notable example of this detachment from international threat and the associated state of unpreparedness was the Cuban Missile Crisis. Not only was the U.S. public unprepared for a nuclear attack, but despite anecdotal reports of high stress and tensions, a study by NORC found only a third (36 percent) reported that the week of the Cuban Missile Crisis was “different than most weeks” and of those that said it was, only 11 percent said Cuba was the difference.³⁸ Such was the case just prior to the millennium. In December, just weeks before the New Year, while a third (35 percent) believed the Y2K computer error would cause major problems in general, only 14 percent believed it would cause major problems for them personally.³⁹ On New Year’s Eve, only 7 percent believed it was very likely a major problem would result from the Y2K error. Accordingly, only 11 percent said they would take special precautions that evening.⁴⁰

CONCLUSION

In an age where the perception of societal threat, be it from international terrorism, rogue nuclear states, industrial calamities or major natural disasters is presumably high, the U.S. public seems perhaps aware or anxious, but clearly unmotivated to pursue actions that are thought to enhance personal emergency readiness. While this striking disconnect between awareness and personal response may be difficult to understand, a comprehensive review of public preparedness surveys reveals little change in readiness behavior since 1940. In effect, during the past 65 years of U.S. history, through world war, imminent threat of nuclear annihilation, global sys-

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tem breakdown, international terrorism on U.S. soil and the reality of catastrophic weather events, nothing seems to spur more than a relatively small minority of citizens to take basic actions to improve their chances of surviving a major disaster.

Addressing the barriers to improving public preparedness is important. It is increasingly understood that citizen participation in disaster planning and response is an essential factor in determining actual readiness for major catastrophic events. In fact, optimal preparedness is best understood as a partnership between government strategies and individual behaviors. The failures of “both partners” were painfully evident in the aftermath of Hurricane Katrina. Government response was late, disorganized and frequently ineffective. Citizens in the affected region often fended well for themselves, but many could have done so much more effectively with basic planning well in advance of this particularly devastating storm. Still to be examined is the mass evacuation attempted following Hurricane Katrina and the behavioral consequences of extreme poverty and chronically reduced access to public services. Clearly, these could be significant determining factors in the successful evacuation of an indigent population. Late evacuation, general confusion, loss of personal documents and medical records and separation of children from parents are among the problems that may have been less prevalent had more families engaged in disaster planning in the months or year prior to the gathering clouds of one of the biggest storms in modern U.S. history. The entire experience represents a critical opportunity to learn a great deal about preparing for disasters, no matter what the context, and human behavior during acute crises. If we fail to appreciate the lessons of Katrina and the patterns of disengagement observed during the Second World War and the Cold War, prior to Y2K, and after September 11th, we likely face the same kinds of consequences during future threats, natural or otherwise. ¹

NOTES

¹ George W. Bush, “Citizen Preparedness in War on Terrorism Executive Order” (press release, The White House, Washington, DC: 2001).

² Methodology as described here is from Irwin Redlener, Dennis Johnson, et al., “Snapshot 2005: Where the American Public Stands on Terrorism and Preparedness Four Years After September 11” (New York: National Center for Disaster Preparedness, 2005); Irwin Redlener, Dennis Johnson, et al., “Follow-Up 2005: Where the American Public Stands on Terrorism and Preparedness After Hurricanes Katrina and Rita” (New York: National Center for Disaster Preparedness, 2005b).

³ American Red Cross, “Attitudes and Behaviors Toward Disaster Preparedness” (Reston, Virginia: American Red Cross, 2004); Marsha Evans, “Personal Preparedness,” *Washington Times*, 2004; Mimi Hall, “Most Not Prepared for Attack,” *USA Today*, 2004; Calvin Sims, “Poll Finds Most Americans Have Not Prepared for a Terror Attack,” *New York Times*, 2004; Redlener (2005); Redlener (2005b).

⁴ Hillel W. Cohen, Robert M. Gould, et al., “The Pitfalls of Bioterrorism Preparedness: the Anthrax and Smallpox Experiences,” *American Journal of Public Health* 94, no.10 (2004): 1667-1671; Jeanne Meserve., “Duct tape sales rise amid terror fear,” CNN, 2003; U.S. Department of Homeland Security, “ReadyAmerica” (Washington, DC: U.S. Department of Homeland Security, 2004); U.S. Department of Homeland Security, “Interim National Preparedness Goal” (Homeland Security Presidential Directive 8: National Preparedness, Washington, DC: 2005).

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⁵ Redlener (2005); David W. Moore, "Almost Half of American Expect Terrorist Attack in 2006" (The Gallup Organization, Washington, DC: 2006).

⁶ Gregory Thomas, *Freedom From Fear* (New York: Random House, 2006); U.S. Department of Homeland Security, *Frequently Asked Questions: National Preparedness Goal*, (Washington, DC: 2006), 8.

⁷ Lydia Saad, "Public Relieved About Terrorism as "Orange" Alert Drags On" (Washington, DC: The Gallup Organization, 2003).

⁸ *New York Times Magazine*, 6 February 2005.

⁹ See, for example, New York City's "Ready New York" campaign.

¹⁰ See Federal Emergency Management Administration (www.fema.gov) and American Red Cross (www.redcross.org).

¹¹ Redlener (2005); Redlener (2005b).

¹² See, for example, Meizhu Lui, Emma Dixon and Betsy Leondar-Wright, "Stalling The Dream: Cars, Race, and Hurricane Evacuation," (United for a Fair Economy's third Annual Report, Boston: 2006), 7, 2.

¹³ Gallup Organization, "The Gallup Poll #255" (Washington, DC: 1941).

¹⁴ For an in-depth look at civil defense, see Laura McEnaney, *Civil Defense Begins at Home: Militarization Meets Everyday Life in the Fifties* (Princeton, New Jersey: Princeton University Press, 2000).

¹⁵ Gallup Organization, "The Gallup Poll #262" (Washington, DC: 1942).

¹⁶ Gallup Organization, "The Gallup Poll #301" (Washington, DC: 1943).

¹⁷ Gallup Organization (1943).

¹⁸ Gallup Organization, "The Gallup Poll #517" (Washington, DC: 1953).

¹⁹ Gallup Organization, "The Gallup Poll #531" (Washington, DC: 1954).

²⁰ Gallup Organization, "The Gallup Poll #627" (Washington, DC: 1960).

²¹ Gallup Organization, "The Gallup Poll #651" (Washington, DC: 1961).

²² Gallup Organization (1961); Gallup Organization, "The Gallup Poll #652" (Washington, DC: 1961b).

²³ Tom W. Smith, "The Impact of the Cuban Missile Crisis on American Public Opinion" (Chicago: National Opinion Research Center, 2002), 25.

²⁴ *Ibid.*, 25.

²⁵ Gallup Organization, "The Gallup Poll #964" (Washington, DC: 1976).

²⁶ Gallup Organization, "The Gallup Poll #118G" (Washington, DC: 1978).

²⁷ Gallup Organization, "The Gallup Poll #175G" (Washington, DC: The Gallup Organization, 1981).

²⁸ Langley Carleton Keyes and Jennifer Leaning, *The Counterfeit Ark: Crisis Relocation for Nuclear War* (Cambridge, Mass.: Ballinger Publishing Company, 1984).

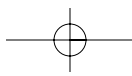
²⁹ Gallup Organization, "Americans and the Y2K Millennium Bug" (Washington, DC: 1999).

³⁰ William Jefferson Clinton, "Year 2000 Information and Disclosure Act" (informal statement after signing into law S.2392, Washington, DC: 19 October 1998).

³¹ Gallup Organization, "The Gallup March I Special Interest Survey" (Washington, DC: 1999b).

³² Gallup Organization, "Y2K Millennium bug—Wave 3" (Washington, DC: The Gallup Organization, 1999d).

³³ Ariel Merari, "Israel's Preparedness for High Consequence Terrorism," in *Countering Terrorism: Dimensions of Preparedness*, ed. Arnold Howitt and Robyn Pangl (Cambridge, Mass.: MIT Press, 2003), 345-370.



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³⁴ Redlener (2005); Redlener (2005b).

³⁵ Moore.

³⁶ Gallup Organization (1941).

³⁷ Moore; Smith, 18-19.

³⁸ Smith, 18-19.

³⁹ Gallup Organization, "New Year's Terrorism More Likely Than Major Computer Failures, Says Public" (Washington, DC: 1999c).

⁴⁰ Ibid.

