

Robert B. and Helen S.
Meyner Center
For the Study of State and Local Government

BIOTERRORISM:

STATE OF PREPAREDNESS IN THE GREATER LEHIGH VALLEY AND WARREN COUNTY

A Report of the

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for the Study of State and Local Government

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**The Robert B. and Helen S. Meyner Center
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Executive Summary

This report conveys the results of a January-February 2003 bioterrorism-preparedness survey of police, fire, EMS, hospital, and emergency-management first responders in Berks, Lehigh, Northampton, and Warren Counties conducted by the Robert B. and Helen S. Meyner Center for the Study of State and Local Government at Lafayette College. The purpose of the survey was to obtain a general picture of the region's preparedness to respond to bioterrorism.

The level of preparedness for a terrorist attack in the Greater Lehigh Valley-Warren County region is reported by first responders to be moderate to low; the region's level of preparedness for bioterrorism is judged to be low to very low. That is, 55 percent of the respondents reported a moderate level of preparedness for a conventional terrorist assault, while 63 percent reported a low to very-low level of preparedness for a bioterrorist attack. Only 12 percent reported high to very-high preparedness for bioterrorism. Smaller communities, especially those under 5,001 people, reported lower preparedness levels than did larger jurisdictions.

At the same time, 60 percent believe that the possibility of a significant (200 or more victims) terrorist incident in our region is low to very low. However, 69 percent believe there is a moderate to very high possibility that our region will be required to respond to people fleeing into our area from a terrorist attack in a nearby area, such as New York City or Philadelphia. Warren County reported the highest possibility of in-flight, followed by Northampton County.

The survey results indicate that bioterrorism has not become a new or high budget priority since September 11, 2001; very little has been expended on preparing for bioterrorism; first responders believe they are not receiving adequate funding assistance from the state and federal governments; very little equipment has been purchased for bioterrorism; and very few practice drills have been executed for bioterrorism. Fire and especially emergency medical services (EMS) responders appear to have weaker preparedness levels and response capacities than police, though all are low.

Most first-responder organizations have, however, educated personnel and improved communication capabilities since September 11, 2001. Slightly more than half of first-responder organizations have implemented joint-response programs, and these programs are reported to be successful. Most first-responder organizations have good relations with the federal and state governments in terms of information and interagency cooperation, and at least half reported that federal and state agencies have provided them with education, information, and technical assistance.

Another important finding is that the level of bioterrorism preparedness is related to the perceived possibility of a terrorist attack in the region or in-flight from bioterrorism elsewhere. Generally, the lower the perceived possibility of a terrorist attack or in-flight, the lower the preparedness. This finding highlights key public-policy questions: What levels and types of bioterrorism risks, including panic-causing hoaxes, do we face in our region, and what levels and types of bioterrorism preparedness are we willing to support?

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The views expressed herein are not necessarily those of the Kirby Government and Law Society or of Lafayette College.

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Introduction

Preparing to prevent, detect, and respond to terrorism is now a fact of life for Americans. Worldwide, terrorist incidents have increased more than fivefold since the 1970s, and the average number of people killed in terrorist attacks has doubled over these decades. The character of terrorism also has evolved from political violence to transcendent violence motivated by religious or ideological fervor. The nature of terrorism has changed, too. Terrorists now seek to obtain weapons, especially biological weapons, capable of mass destruction and panic. In the past, terrorists usually avoided attacks on civilians out of concern that civilian casualties would alienate potential supporters. Today, mass civilian casualties—along with mass panic, communications disruption, economic upheaval, and governmental chaos—are major terrorist objectives.

The horrific assaults of September 11, 2001, as well as the anthrax attacks a month later, brought home the vulnerability of the United States to deadly stealth attacks of enormous magnitude. The location of the September 2001 incidents in New York City, western Pennsylvania, and Washington, D.C., also highlighted the vulnerability of the 977,195 residents of the Greater Lehigh Valley and Warren County to direct terrorist attacks or to the spillover consequences of attacks on our big-city neighbors, such as New York City and Philadelphia. Being located in the heart of the East Coast megalopolis, our region is potentially a prime target. It is vital, therefore, that we prepare appropriately for such an emergency and educate ourselves about dangers that might lie ahead.

In response to this need, and in consultation with local officials and first responders in our region, the Robert B. and Helen S. Meyner Center for the Study of State and Local Government at Lafayette College surveyed first responders in Pennsylvania's Berks, Lehigh, and Northampton Counties and in New Jersey's Warren County about our region's state of preparedness to respond to acts of terrorism, especially bioterrorism. The survey was conducted as part of preparation for a public forum for local officials entitled "Bioterrorism: Preparation, Finance, and Regional Cooperation" organized and hosted by the Meyner Center at Lafayette College on May 2-3, 2003.

We have focused primarily on bioterrorism because:

- Preparing for bioterrorism will save lives.
- To date, there has been little public experience in responding to bioterrorism.
- While terrorist attacks employing conventional explosives or chemical, nuclear, radiological, or other weapons usually require immediate "lights and sirens" responses, bioterrorism requires quite different responses.
- Many local officials in the region believe that bioterrorism deserves more priority for research, preparation, and public education.

- Bioterrorism is especially difficult to prevent because small amounts of some agents able to cause mass deaths can be transported and disseminated out of public and governmental view.
- Bioterrorism is especially difficult to detect because the effects of an agent might not become visible until days or weeks after its dissemination.
- Bioterrorism poses greater and more hidden dangers to the lives of first responders and Good Samaritans than most other types of terrorist attacks.
- The communicable nature of some biological agents and diseases means that a bioterrorist attack could have dire consequences for our region even if “ground zero” is located a hundred miles away.
- The stealthy, insidious nature of bioterrorism induces high levels of public anxiety and fear.
- Bioterrorism has a high possibility of inducing mass panic and, therefore, an extraordinary need for public officials to communicate quickly, effectively, and honestly with citizens and to maintain civil order.
- Bioterrorism is especially susceptible to hoaxes and speculation that can induce public panic, social disruption, service overloads, and economic damage.
- Bioterrorism attacks or hoaxes could overwhelm public and private health and other services in our region. (For example, during the anthrax scare of Fall 2001, 85 percent of state and territorial public-health laboratories reported that demands to test alleged bioterrorism agents disrupted routine work and delayed testing for tuberculosis, sexually transmitted illnesses, and other infectious diseases.)
- Bioterrorism could require extraordinary public responses, such as quarantines.
- Detecting and responding to a bioterrorist attack require high levels of inter-governmental, interjurisdictional, interagency, and public-private cooperation and coordination.
- Preparing for bioterrorism will have additional and multiple-use benefits of increasing preparedness for other types of terrorism; for related non-terrorist events of pandemic nature, such as a biological or chemical accident or an infectious outbreak, such as SARS; and for public health and safety generally.

Bioterrorism

The U.S. Department of State defines terrorism as “premeditated, politically motivated violence perpetrated against noncombatant targets by subnational groups or clandestine agents, usually intended to influence an audience.” This bureaucratic definition obscures our key concerns that terrorists seek to kill people, especially unsuspecting civilians, on a massive scale and to cause panic and chaos, disrupt communications, cripple the economy, and paralyze government.

Bioterrorism, which uses deadly biological agents, is well suited to achieve terroristic objectives. A bioterrorist attack, moreover, could be mounted by a single individual as well as by a group. An attack could be initiated not only by a foreign national but also by a U.S. citizen, whether a disgruntled employee, disaffected protester, or deranged person. A bioterrorist attack could originate from something as small and seemingly innocuous as placing an agent in food at a small restaurant in our region. It could also originate from agents placed in our public water supply or from agents aerosolized within or over our region. An attack could be aimed instead at animals or plants in an effort to disrupt food supplies or transmit a disease communicable to human beings—a potential danger in our region because of its close and highly desirable urban-rural interfaces.

The U.S. Centers for Disease Control and Prevention has identified the following agents as possible bioweapons of choice for terrorists.

1. **Anthrax**, which is available through more than 2,000 research laboratories in the United States itself, is highly lethal, though somewhat difficult to disseminate.
2. **Botulinum toxin**, the most poisonous substance known to us, is not contagious but produces a descending paralysis called botulism if inhaled from aerosolized dispersal or ingested from consuming tainted food or drink.
3. **Plague**—pneumonic, bubonic, and septicemic—is contagious and has a lethality rate of 100 percent if untreated and a lethality rate of about 50 percent even if treated.
4. **Smallpox**, a contagious disease, which has killed millions of people over the centuries, is fatal in about 30 percent of cases, though severe in symptoms and permanently disfiguring short of death.
5. **Tularemia** (aka rabbit fever and deer fly fever) is highly infectious (a single tularemia bacterium can cause infection), though not contagious and not usually lethal.
6. **Viral hemorrhagic fevers**, which cause severe internal and external bleeding, but are not always fatal, include four virus families: filoviruses (e.g., Ebola), arenaviruses (e.g., Lassa), bunyaviruses (e.g., Rift Valley Fever), and flaviviruses (e.g., yellow fever and dengue).

Other potential agents aimed at human beings could include, among others, Aflatoxin, Brucellosis, Cholera, Enterotoxin, Epsilon toxin, Glanders, Hantavirus, Melioidosis, Nipah Virus, Psittacosis, Q fever, Ricin, Salmonella, Typhus, and Viral Encephalitis.

Although this list of agents is frightening, it should be kept in mind that these biological agents are difficult to produce, store, transport, and disseminate effectively. For example, anthrax must, in effect, be weaponized before it can be disseminated as a killer, though such anthrax was apparently used in the October 2001 mailed attacks in the United States. Producing pneumonic plague bacteria requires scientific knowledge and technical expertise, and the bacteria degrade in sunlight and heat, as do tularemia bacteria, though both plague and tularemia can survive in soil for months or more.

At the same time, just as there are suicide bombers, there could be suicide biological-bombers, persons who deliberately infect themselves with a contagious disease and then disseminate it via air, rail, bus, and automobile travel. As with the outbreak of SARS in China in 2002-03, a single person or small group of people could infect large numbers of people regionwide, nationwide, or worldwide before attracting attention and dying themselves. Once detected, however, blocking measures can be taken at borders, airports, and other entry points. The natural limit to this type of terrorism, moreover, is that most deadly contagious diseases would make suicide terrorists themselves so ill so quickly as to prevent them from traveling too far, if at all.

Most important, early detection and effective responsiveness can block widespread harm from a biological attack, and early treatment can significantly reduce fatalities and permanent disabilities. Even though bioterrorism seems to be the most stealthy, frightening form of terrorism, it can be one of the easiest to contain and suppress if we are adequately prepared and educated in advance.

Although, to date, an oft-predicted rash of terrorist attacks has not occurred in the wake of the war in Iraq, the possibility of terrorist attacks remains high in the long run. A single attack could produce massive casualties and catastrophic health, social, economic, and governmental consequences regionally or nationally. Even a small attack on one government office or school with few, if any, fatalities could still cause mass panic and economic paralysis. While the nation as a whole needs to deal with terrorism prevention through its international relations and foreign policies and through its homeland security arrangements, the states and especially local governments remain the first and most important detectors and responders. Hence, advance preparation on their part will produce life-saving benefits in the event of an attack in or near the Greater Lehigh Valley-Warren County region.

Overall Preparedness

Is the Greater Lehigh Valley-Warren County region prepared to respond to acts of terrorism and bioterrorism? “Not very well” is the basic response of first responders in our region.

Terrorism Preparedness

Only small percentages of respondents believe that their level of preparedness to respond to terrorist incidents involving 200 or more victims is high (see Table 1). Lehigh County, home of Allentown, the region’s largest city, reported the highest level of preparedness, but even that was cited by only 21 percent of the respondents. Overall, only 15 percent of respondents reported very-high to high preparedness. The overall level of preparedness is only “moderate” according to most respondents (55 percent), while 30 percent reported low to very-low preparedness.

Differences among the Greater Lehigh Valley’s counties are evident here. Respondents from Lehigh County more often reported both the highest and lowest levels of preparedness—perhaps due to the tremendous range of very large and very small communities in the county. Northampton County respondents reported generally the highest levels of preparedness—due perhaps to the county’s closer proximity to New Jersey and New York City.

There were no substantial differences among police, fire, and emergency medical services (EMS) respondents. That is, 56 percent of police, 53 percent of fire, and 53 percent of EMS respondents reported “moderate” preparedness. Responses by population size of jurisdictions showed rather uneven patterns. That is, 39 percent of the respondents from communities smaller than 5,001 people reported low to very-low preparedness, compared to 20 percent of respondents from mid-sized jurisdictions of 5,001 to 25,000 people and 20 percent of respondents from large jurisdictions exceeding 25,000 residents. Yet, 14 percent of small-community respondents reported very-high to high preparedness, compared to 17 percent from mid-sized jurisdictions and only 11 percent from large jurisdictions.

TABLE 1
Level of Preparedness to Respond to Terrorist Incidents

How would you categorize your level of preparedness to respond to terrorist incidents involving 200 or more victims?				
Response	Total	County		
		Berks	Lehigh	Northampton
Very High - High	14.9%	9.1%	21.1%	14.0%
Moderate	55.4	57.6	31.6	62.8
Low - Very Low	29.7	33.3	47.4	23.3
Number of Respondents	101	33	19	43

Bioterrorism Preparedness

However, first responders believe that the Greater Lehigh Valley-Warren County region is much less prepared to respond to bioterrorism (see Table 2 below). As one respondent noted, “I don’t think as a department, or at the county, we are prepared for bioterrorism.” Although 12 percent of the respondents reported very-high to high preparedness, 25 percent reported only moderate preparedness, and fully 63 percent reported low to very-low preparedness. Berks County respondents reported the lowest level of preparedness for bioterrorism, while respondents from Lehigh and Northampton Counties reported higher and comparable preparedness levels.

Fully 61 percent of police, 67 percent of fire, and 80 percent of EMS respondents reported low preparedness for bioterrorism. Smaller jurisdictions, especially those having fewer than 5,001 people, reported lower levels of preparedness than did larger localities. Ten percent of respondents from small jurisdictions under 5,001 residents reported very-high to high preparedness, while 17 percent of respondents from mid-sized localities of 5,001 to 25,000 people reported such preparedness, and 25 percent of respondents from jurisdictions exceeding 25,000 population reported such high preparedness.

The results for bioterrorism, then, are dramatically different from the first responders’ assessment of their preparedness to cope with conventional terrorist attacks.

TABLE 2
Level of Preparedness to Respond to Bioterrorist Incidents

How would you categorize your level of preparedness to respond specifically to bioterrorist incidents?

Response	Total	County		
		Berks	Lehigh	Northampton
Very High - High	11.9%	3.0%	21.1%	14.0%
Moderate	24.8	18.2	21.1	25.6
Low - Very Low	63.4	78.7	57.9	60.5
Number of Respondents	101	33	19	43

Probability of Major Terrorist Incidents in Our Region

Possibility of Local Terrorist Attack

At the same time, though, most first responders (60 percent) believe that the probability of a terrorist incident involving 200 or more victims in our region is low to very low (see Table 3). Only 7 percent believe the probability is very high to high (with only one respondent saying “very high”), and one-third perceive the probability as moderate. Those reporting a low probability included 61 percent of police, 63 percent of fire, and 67 percent of EMS respondents. Most jurisdictions reported comparable levels of probability regardless of population size, except for localities having 50,001 or more people, from which 9 percent reported a high probability and 46 percent reported a moderate probability. Generally, though not consistently, jurisdictions with small police departments perceived a lower probability of a major terrorist incident than did jurisdictions with large police departments (26 or more full-time personnel).

TABLE 3
Probability of Local Terrorist Incident

In your opinion, what is the probability of a terrorist incident involving 200 or more victims in your organization’s region?				
Response	Total	County		
		Berks	Lehigh	Northampton
Very High - High	6.9%	9.1%	10.5%	4.6%
Moderate	32.7	33.3	31.6	32.6
Low - Very Low	60.4	57.6	57.9	62.8
Number of Respondents	101	33	19	43

Probability of In-Flight from External Terrorism

Responders in the Greater Lehigh Valley-Warren County region believe, however, that there is a much higher probability of people fleeing into the region from a terrorist attack in a nearby metropolitan area, such as New York City or Philadelphia. Nearly a third perceive a very-high to high probability of such in-flight, while more than a third (36 percent) perceive a moderate in-flight probability. Within the Greater Lehigh Valley, respondents from Northampton County, which is geographically closer to New York City than Berks and Lehigh Counties, perceive the highest possibility of in-flight (see Table 4). Respondents from Warren County, New Jersey, which is even closer to New York City, perceive the highest probabilities of in-flight, with 8 percent reporting the probability being very high, 33 percent reporting it high, and 33 percent reporting it moderate.

TABLE 4
Probability of In-Flight from External Terrorism

What do you think is the probability that your organization will be required to respond to people fleeing into your area from a terrorist incident in a nearby area, such as New York City, Philadelphia, or Harrisburg?				
Response	Total	County		
		Berks	Lehigh	Northampton
Very High - High	32.3%	18.2%	30.0%	41.9%
Moderate	36.3	42.4	40.0	30.2
Low - Very Low	31.4	39.4	30.0	28.0
Number of Respondents	102	33	20	43

If these perceptions are accurate, then first responders in our region are more likely to be second responders called upon to assist neighboring communities as well as people, perhaps large numbers of people, fleeing into our region. Although such in-flight would likely occur after detection of a bioterrorist attack elsewhere and possibly identification of the biological agent, thus making aid responses more knowledgeable and effective, in-flight could nevertheless pose a grave threat to the region because refugees might unsuspectingly transport the biological agent on their bodies, personal effects, and automobiles or unknowingly carry a contagious disease into the region prior to experiencing its symptoms and receiving a diagnosis. Massive in-flight could overload public health and other facilities in Warren County and the Greater Lehigh Valley. Such in-flight could also induce mass panic in the region, produce enormous pressure on public officials to seal off the region against refugees, and cause secondary and tertiary flight from this region causing a domino effect. Alternatively, massive in-flight could occur from a hoax or speculation about bioterrorism elsewhere, thus still placing heavy burdens on facilities and public services in Warren County and the Greater Lehigh Valley and still causing mass panic and other substantial emergency-response challenges.

Potential Consequences of Perceptions for Public Policy

Perceptions of the probability of terrorism occurring initially or secondarily in our region could have significant public policy impacts because, generally, the survey results indicate that the higher the level of perceived probability of terrorism, the higher the level of reported preparedness or concern about preparedness.

For example, among respondents perceiving high to very-high probabilities of a major terrorist attack in their area, only 17 percent reported low to very-low preparedness for terrorism. Among those perceiving a moderate probability of terrorism, 30 percent reported low to very-low preparedness. Among respondents seeing low to very-low probabilities of a major local terrorist attack, 32 percent reported low to very-low preparedness.

Similarly, among the respondents perceiving high to very-high probabilities of terrorism, 43 percent reported high to very-high preparedness for bioterrorism. Among those perceiving a moderate terrorist possibility, 15 percent reported a high (but not very high) level of preparedness. Among respondents foreseeing a low to very-low terrorism probability, only 5 percent reported high (but not very high) preparedness, with fully 73 percent of these respondents reporting low to very-low preparedness to respond to bioterrorism.

Preparing for Bioterrorism

Despite the low levels of preparedness reported by the respondents, measures of preparation have been undertaken by and for the region's first responders. As Table 5 indicates, the leading measure has been to educate personnel (as reported by 76 percent of the respondents), followed closely by enhancements of communication capabilities (as reported by 72 percent of the respondents). Both of these measures reflect clear lessons from the tragic experiences of September 11, 2001. Far fewer respondents, however, reported purchasing bioterrorism-response equipment (32 percent) and executing practice drills (20 percent).

TABLE 5
Measures of Bioterrorism Preparation

In regard to measures of preparation, has your organization:				
Response	Total	County		
		Berks	Lehigh	Northampton
Educated Personnel				
Yes	76.2%	75.8%	68.4%	76.7%
No	21.8	21.2	31.6	20.9
Other	2.0	3.0	0.0	2.3
Enhanced Communication Capabilities				
Yes	72.3	72.7	73.7	72.1
No	21.8	15.2	26.3	23.3
Other	5.9	12.1	0.0	4.7
Purchased Equipment				
Yes	31.7	33.3	31.6	30.2
No	62.4	57.6	63.2	65.1
Other	5.9	9.1	5.3	4.7
Executed Practice Drills				
Yes	19.8	15.2	36.8	14.0
No	76.2	84.8	63.2	79.1
Other	4.0	0.0	0.0	7.0
Number of Respondents	101	33	19	43

Police officials more often reported implementing such measures than did fire and EMS respondents. Most evident, for example, 46 percent of police respondents reported purchasing equipment, compared to 20 percent of fire and 13 percent of EMS personnel. Likewise, 83 percent of police respondents reported enhancing communication capabilities, compared to 73 percent of fire and 47 percent of EMS respondents. Respondents from larger jurisdictions more often reported executing practice drills than did respondents from smaller localities, but on the other measures of preparation, there were no consistent, notable differences by size of jurisdiction.

Of the respondents perceiving high possibilities of terrorism, 33 percent reported having purchased equipment, compared to 40 percent of those perceiving a moderate probability and 26 percent of those perceiving a low probability. Among those perceiving high to very-high probabilities of local terrorism, 86 percent have educated personnel, compared to 73 percent of those perceiving a moderate possibility and 77 percent of those perceiving low probabilities.

Table 6 below displays percentage responses to an open-ended question about ways in which respondents believe they are best prepared to respond to bioterrorism. In response to this question, one respondent wrote that it engages in “networking and planning with all agencies that would respond to a bioterror event.”

TABLE 6
Areas of Best Bioterrorism Preparedness

In what ways are you best prepared to respond to bioterrorism?		
Response	% of Response	% of Respondents
Training	25.5%	31.1%
Overall, not prepared	20.9	25.6
Planning	17.3	21.1
Equipment	12.7	15.6
Relying on county	11.8	14.4
Personnel	9.1	11.1
Relying on county for equipment	1.8	2.2
Relying on county for training	0.9	1.1
Number of Responses / Respondents	110	90

Table 7 below displays percentage responses to an open-ended question about ways in which respondents believe they are least prepared to respond to bioterrorism. In response to this question, one respondent said, “Personnel. We have one person for 3,500 people across 20 square miles, and we are low on equipment and general infrastructure.” Another reported, “No expertise, lack of training, and lack of funds.” Concerns about the safety of first responders and their families and about protective clothing and equipment also were expressed by several respondents.

TABLE 7
Areas of Least Bioterrorism Preparedness

In what ways are you least prepared to respond to bioterrorism?		
Response	% of Response	% of Respondents
Equipment	33.9%	44.4%
Training	22.9	30.0
Overall, not prepared	14.4	18.9
Personnel	12.7	16.7
Inadequate budget	6.8	8.9
Preparedness plan	5.1	6.7
Not sure	2.5	3.3
Relying on county, no infrastructure	1.7	2.2
Number of Responses / Respondents	118	90

Implementing Joint-Response Programs

Mutual aid and joint-response arrangements are fairly common among first responders and often necessary. In the case of bioterrorism preparedness (see Table 8), more than half (54 percent) of the respondents reported implementing joint-response programs, with Lehigh County reporting the greatest number of such programs (74 percent) followed by Northampton County (54 percent).

Police (56 percent) and fire (53 percent) respondents more often reported joint-response implementation than did EMS respondents (40 percent). Joint-response implementation was reported most often from localities having 5,001 to 25,000 people (69 percent) and least often from jurisdictions having less than 2,500 residents (30 percent), while 53 percent of respondents from localities of 25,001 or more residents reported such implementation. Interestingly, joint-response implementation also was reported more often by those who assessed the probability of a terrorist attack as being low to very low rather than those who assessed the probability more highly.

Responses to this question ranged from (1) “We have disaster plans and mass casualty incident plans already in place with our fire and police departments. Also, the plans include regional EMS organizations” to (2) “Looking into it” to (3) “We are part of a regional task force. However, we have received no training, equipment, or other information regarding our role, responsibilities, etc.”

TABLE 8
Implementation of Joint-Response Programs

Have you implemented any joint-response programs with other agencies or communities?				
Response	Total	County		
		Berks	Lehigh	Northampton
Yes	53.5%	36.4%	73.7%	53.5%
No	37.6	57.6	26.3	30.2
Other	8.9	6.1	0.0	16.3
Number of Respondents	101	33	19	43

Joint-Response Partners

Among the 54 percent who have implemented joint-response programs, the most common partners are EMS units (92 percent), neighboring municipalities (83 percent), fire departments (83 percent), and police departments (81 percent), followed by the regional Pennsylvania Emergency Management Agency (PEMA) office (68 percent), hospitals (66 percent), state police (65 percent), regional Federal Emergency Management Agency (FEMA) office (59 percent), regional Red Cross (58 percent), and the National Guard (27 percent).

TABLE 9
Implementation of Joint-Response Programs

Response	Total	County		
		Berks	Lehigh	Northampton
Have you implemented any joint-response programs with state police; National Guard; municipalities; neighboring police department; neighboring fire department; hospitals; regional Red Cross; regional PEMA office; regional FEMA office; EMS; or additional agencies?				
Emergency Medical Services (EMS)				
Yes	92.2%	92.3%	92.9%	90.3%
No	6.3	7.7	0.0	9.7
Other	1.6	0.0	7.1	0.0
Municipalities				
Yes	82.8	92.3	85.7	80.6
No	12.5	7.7	7.1	19.4
Other	4.7	0.0	7.1	0.0
Neighboring Fire Department				
Yes	82.5	92.3	76.9	77.4
No	15.9	7.7	23.1	19.4
Other	1.6	0.0	0.0	3.2
Neighboring Police Department				
Yes	81.0	92.3	85.7	76.7
No	15.9	7.7	7.1	23.3
Other	3.2	0.0	7.1	0.0
Regional PEMA office				
Yes	68.3	69.2	71.4	71.0
No	25.4	30.8	14.3	22.6
Other	6.3	0.0	14.3	6.5

TABLE 9 (Continued)
Implementation of Joint-Response Programs

Have you implemented any joint-response programs with state police; National Guard; municipalities; neighboring police department; neighboring fire department; hospitals; regional Red Cross; regional PEMA office; regional FEMA office; EMS; or additional agencies?

Response	Total	County		
		Berks	Lehigh	Northampton
Hospitals				
Yes	65.6	61.5	78.6	61.3
No	29.7	38.5	14.3	35.5
Other	4.7	0.0	7.1	3.2
State Police				
Yes	65.1	61.5	64.3	63.3
No	33.3	38.5	28.6	36.7
Other	1.6	0.0	7.1	0.0
Regional FEMA office				
Yes	59.0	53.8	61.5	58.6
No	36.1	46.2	23.1	37.9
Other	4.9	0.0	15.4	3.4
Regional Red Cross				
Yes	57.8	53.8	50.0	58.1
No	39.1	46.2	42.9	38.7
Other	3.1	0.0	7.1	3.2
National Guard				
Yes	26.6	7.7	35.7	25.8
No	68.8	84.6	64.3	71.0
Other	4.7	7.7	0.0	3.2
Number of Respondents	64	13	14	31

TABLE 9(Continued)
Implementation of Joint-Response Programs

Have you implemented any joint-response programs with state police; National Guard; municipalities; neighboring police department; neighboring fire department; hospitals; regional Red Cross; regional PEMA office; regional FEMA office; EMS; or additional agencies?

Response	% of Response	% of Respondents
Additional Agencies		
Local / County EMA	16.9%	32.1%
Federal Bureau of Investigation (FBI)	5.7	10.7
Pennsylvania Department of Environmental Protection (DEP)	5.7	10.7
Public Health Bureau	5.7	10.7
Regional Counter Terrorism Task Force	5.7	10.7
United States Environmental Protection Agency (EPA)	5.7	10.7
Local Hazardous Materials (HAZMAT)	3.8	7.1
Private Sector	3.8	7.1
Utilities Company	3.8	7.1
Salvation Army	3.8	7.1
Berks County Crime Alert	1.9	3.6
Centers for Disease Control and Prevention (CDC)	1.9	3.6
Churches	1.9	3.6
Civil Air Patrol	1.9	3.6
County Emergency Management	1.9	3.6
District Attorney Office	1.9	3.6
Federal Government	1.9	3.6
National Park Service	1.9	3.6
New Jersey Office of Emergency Management	1.9	3.6
New Jersey State Police	1.9	3.6
Pennsylvania Department of Transportation (PENNDOT)	1.9	3.6
Pennsylvania Emergency Management Agency (PEMA)	1.9	3.6
Pennsylvania Game Commission	1.9	3.6
School Districts	1.9	3.6
School Nurses Association	1.9	3.6
Sheriff Department	1.9	3.6
United States Attorney Office	1.9	3.6
United States Department of Homeland Security (DHS)	1.9	3.6
United States Department of Health and Human Services (HHS)	1.9	3.6
Youth	1.9	3.6
Number of Responses / Respondents	53	28

Success of Joint-Response Programs

Table 10 below indicates that fully 91 percent of the respondents believe that such cooperation has been successful. All fire respondents (100 percent) reported cooperation as being successful, compared to 86 percent of police and 78 percent of EMS respondents. All respondents from small communities of less than 5,001 people reported successful cooperation, while 86 percent of respondents from localities of 5,001-25,000 population reported successful cooperation, and 80 percent of respondents from jurisdictions having 25,001 or more people reported successful cooperation.

TABLE 10
Success of Joint-Response Programs

Overall, has such joint-response cooperation been successful?				
Response	Total	County		
		Berks	Lehigh	Northampton
Yes	90.5%	83.3%	100.0%	87.1%
No	6.3	0.0	0.0	12.9
Other	3.2	16.7	0.0	0.0
Number of Respondents	63	12	14	31

The four respondents who reported unsuccessful cooperation attributed the lack of success to (1) lack of funds, (2) lack of volunteers, (3) no training, equipment, or information, and (4) a belief that wealthy municipalities see no reason to cooperate with others.

Financing Joint-Response Programs

Table 11 displays responses to an open-ended question: How are you financing such joint-response programs? The respondents identified 11 sources of funding, with the most common response being the respondent's own organization's budget.

TABLE 11
Sources of Financing for Joint-Response Programs

How are you financing such joint-response programs?

Response	% of Responses	% of Respondents
Budget	31.3%	47.3%
Federal government	10.8	16.4
Grants in general	8.4	12.7
County government	7.2	10.9
Pennsylvania Emergency Management Agency (PEMA)	7.2	10.9
State government	7.2	10.9
Fundraising	6.0	9.1
Municipal government	6.0	9.1
Federal Emergency Management Agency (FEMA)	3.6	5.5
Financial resources are unavailable	2.4	3.6
Private sector	2.4	3.6
Centers for Disease Control and Prevention (CDC)	1.2	1.8
Uncertain	2.4	3.6
Not funding such programs	3.6	5.5
Number of Responses / Respondents	83	55

Terrorism as a Budget Priority

Terrorism is not a budget priority in the region. Only 17 percent of respondents reported that they have made terrorism a new budget priority since September 11, 2001 (see Table 12).

There were no substantial differences among police, fire, and EMS respondents, but jurisdictions having more than 5,000 residents more often reported terrorism as a new budget priority. Most notably, 67 percent of respondents from localities having 25,001 to 50,000 people reported terrorism as a new budget priority. Interestingly, however, no respondent perceiving a high to very-high probability of a terrorist incident said that terrorism is now a new budget priority.

TABLE 12
Terrorism as a New Budget Priority

Since September 11, 2001, has your organization made terrorism a new budget priority?

Response	Total	County		
		Berks	Lehigh	Northampton
Yes	16.7%	12.1%	30.0%	11.6%
No	82.4	84.8	70.0	88.4
Number of Responders	102	33	20	43

Among the 17 percent who reported terrorism as a new budget priority, 14 percent reported it to be a very-high or high priority, 36 reported it to be a moderate priority, and 50 percent reported it to be a low to very-low priority (see Table 13).

TABLE 13
Level of Terrorism as Budget Priority

If yes, would you say that your budget priority for terrorism is?				
Response	Total	County		
		Berks	Lehigh	Northampton
Very High-High	14.3%	0.0%	25.0%	0.0%
Moderate	35.7	60.0	50.0	23.1
Low - Very Low	50.0	40.0	25.0	76.9
Number of Respondents	28	5	8	13

Expenditures on Bioterrorism Preparedness

Similarly, few expenditures have been made on bioterrorism preparedness since September 11, 2001. Fully 71 percent of the respondents reported no expenditures (see Table 14). Among the few who reported expenditures, most reported less than \$10,000. As one respondent said, “Daily operations are difficult enough to cover, but the expansion of services for bioterrorism is a great added cost, both in training and equipment.”

No expenditures were reported by 93 percent of EMS, 67 percent of fire, and 64 percent of police respondents. There were no consistent relationships between expenditures and the population size of respondents’ jurisdictions, but interestingly, all respondents who perceive high to very-high probabilities of a terrorist incident in their area nevertheless reported no expenditures on preparedness.

TABLE 14
Bioterrorism Expenditures Since September 11, 2001

How much has your organization spent on bioterrorism efforts since September 11, 2001?				
Response	Total	County		
		Berks	Lehigh	Northampton
None	71.0%	72.7%	65.0%	75.6%
\$100 - 500	8.0	9.1	15.0	4.9
\$501 - 1,000	5.0	6.1	0.0	4.9
\$1,001 - 10,000	11.0	9.1	10.0	12.2
\$10,001 - 50,000	0.0	0.0	0.0	0.0
\$50,001 plus	3.0	0.0	5.0	2.4
No Response	2.0	3.0	5.0	0.0
Number of Respondents	100	33	20	41

Sources of Funding for Bioterrorism Preparedness

Some 38 percent of respondents reported receiving some funding for bioterrorism preparedness. Among these respondents, 61 percent reported receiving funds from their local government, 47 percent from their state government, 42 percent from the federal government, 34 percent from their county government, and 11 percent each from nonprofit organizations and private corporations.

TABLE 15
Sources of Funding

From what sources has your organization received funding to prepare for bioterrorism: local government; county government; state government; federal government; non-profit organizations; private corporations; or other funding?

Response	Total	County		
		Berks	Lehigh	Northampton
Local government				
Yes	60.5%	63.6%	50.0%	57.1%
No	39.5	36.4	50.0	42.9
State government				
Yes	47.4	45.5	60.0	42.9
No	52.6	54.5	40.0	57.1
Federal government				
Yes	42.1	45.5	50.0	28.6
No	57.9	54.5	50.0	71.4
County government				
Yes	34.2	36.4	40.0	28.6
No	65.8	63.6	60.0	71.4
Non-profit organizations				
Yes	10.5	0.0	10.0	14.3
No	89.5	100.0	90.0	85.7
Private corporations				
Yes	10.5	18.2	10.0	7.1
No	89.5	81.8	90.0	92.9
Number of Respondents	38	11	10	14

TABLE 15 (Continued)
Sources of Funding

From what sources has your organization received funding to prepare for bioterrorism: local government; county government; state government; federal government; non-profit organizations; private corporations; or other funding?

Response	% of Response	% of Respondents
Other funding		
“ Yes”, but no explanation	28.6%	33.3%
Advertising	14.3	16.7
Budget	14.3	16.7
Fundraising	14.3	16.7
Lions Club	14.3	16.7
Multipurpose / reserved money	14.3	16.7
Private Sector	14.3	16.7
Number of Responses / Respondents	7	6

Again, among these funded respondents, funding from local government was reported by 70 percent of police respondents compared to 50 percent of fire and 50 percent of EMS respondents, and only police reported any funding from private corporations. In contrast, only fire respondents reported any funding from nonprofit organizations. Fully, 75 percent of EMS respondents reported funding from their county government compared to 35 percent of police and 10 percent of fire respondents. Likewise, 75 percent of EMS respondents reported funding from their state government compared to 45 percent of police and 40 percent of fire respondents. In turn, one half (50 percent) each of police and EMS respondents reported funding from the federal government compared to 20 percent of fire respondents.

Intergovernmental Relations

The first responders were asked a set of questions about their relations with the federal and state governments. Overall, the respondents reported fairly high levels of information and cooperation received from the federal and state governments, but little funding from either government.

Relations with the Federal Government

As shown in Table 16 below, 64 percent of the respondents reported receiving information about terrorism from the federal government, and 61 percent reported receiving adequate cooperation as well; however, only 23 percent reported receiving adequate funding from the federal government. This latter finding is consistent with the trickle rather than deluge of federal funds promised by Congress and the president to first responders in the aftermath of September 11, 2001.

TABLE 16
Relations with the Federal Government

Do you believe you are receiving adequate information; cooperation; or funding regarding terrorism from the federal government?				
Response	Total	County		
		Berks	Lehigh	Northampton
Information				
Yes	64.4%	69.7%	75.0%	59.5%
No	31.7	24.2	15.0	40.5
Other	4.0	6.1	10.0	0.0
Cooperation				
Yes	60.8	66.7	75.0	53.5
No	28.4	30.3	5.0	34.9
Other	10.8	3.0	20.0	11.6
Funding				
Yes	22.5	12.1	30.0	25.6
No	64.7	66.7	65.0	67.4
Other	12.7	21.2	5.0	7.0
Number of Respondents	102	33	20	43

Fully 91 percent of police respondents reported receiving adequate information from the federal government in contrast to 47 percent of fire and 20 percent of EMS respondents. Likewise, 81 percent of police respondents, compared to 50 percent of fire and 27 percent of EMS respondents, reported receiving adequate federal cooperation. More than a quarter (26 percent) of police respondents said they receive adequate funding from the federal government. Twenty-three percent of fire respondents also reported adequate funding, while only 7 percent of EMS respondents reported such federal funding.

Regarding information and cooperation, there were no substantial differences among respondents from jurisdictions of different populations. On funding, however, only 6 percent of respondents from localities under 5,001 in population reported adequate federal funding, compared to 27 percent of respondents from jurisdictions exceeding 25,000 people and 42 percent of respondents from mid-sized communities having 5,001 to 25,000 residents. As one respondent noted, “We are a small community, and grants go to larger areas.”

Federal Resources

Slightly more than half (51 percent) of the respondents said that they had received education, information, or technical assistance from federal agencies (see Table 17). Such assistance was reported by 62 percent of police, 40 percent of fire, and 27 percent of EMS respondents. Forty-five percent of the respondents from communities under 5,001 in population reported such federal assistance, compared to 53 percent of respondents from jurisdictions exceeding 25,000 people and 58 percent of respondents from localities having 5,001 to 25,000 residents.

On this question, moreover, 60 percent of the respondents who perceive a very-high to moderate probability of terrorism reported receiving such assistance, compared to 44 percent of respondents perceiving a low to very-low probability of terrorism occurring in their area.

Not everyone who answered “yes” then followed up by citing specific agencies, but of those who did respond, Table 17 below shows that respondents receive education, information, or technical assistance from 15 federal entities.

TABLE 17
Federal Agencies Providing Education, Information, or Technical Assistance

Have any federal agencies provided you with education, information, or technical assistance? If yes, what organization is that?		
Response	% of Response	% of Respondents
Federal Bureau of Investigation (FBI)	22.2%	30.4%
Federal Emergency Management Agency (FEMA)	20.6	28.3
United States Attorney Office	11.1	15.2
United States Department of Justice (DOJ)	7.9	10.9
United States Fire Administration (USFA)	7.9	10.9
Alcohol, Tobacco, and Firearms (ATF)	4.8	6.5
Centers for Disease Control and Prevention (CDC)	4.8	6.5
Federal departments and/or federal agencies in general	4.8	6.5
United States Department of Homeland Security (DHS)	3.2	4.3
United States Environmental Protection Agency (EPA)	3.2	4.3
Army National Guard	1.6	2.2
National Institutes of Health (NIH)	1.6	2.2
United States Department of Health and Human Services (HHS)	1.6	2.2
United States Department of State	1.6	2.2
United States Department of Transportation	1.6	2.2
Office of Representative Pat Toomey	1.6	2.2
Number of Responses / Respondents	63	46

Relations with the State Government

Overall, 62 percent of the respondents reported receiving adequate cooperation from their state, while 55 percent reported adequate information and 26 percent reported adequate funding from their state government. Thus, respondents reported a higher level of information received from the federal government than from their state government, but slightly, and only slightly, higher levels of cooperation and funding from their state than from the federal government.

TABLE 18
Relations with State Government

Do you believe you are receiving adequate information; cooperation; or funding regarding terrorism from the state government?				
Response	Total	County		
		Berks	Lehigh	Northampton
Cooperation				
Yes	61.8%	60.6%	70.0%	58.1%
No	29.4	27.3	25.0	37.2
Other	8.8	12.1	5.0	4.7
Information				
Yes	54.9	54.5	65.0	51.2
No	38.2	36.4	35.0	41.9
Other	6.9	9.1	0.0	7.0
Funding				
Yes	25.5	24.2	20.0	30.2
No	63.7	57.6	65.0	67.4
Other	10.8	18.2	15.0	2.3
Number of Respondents	102	33	20	43

About two-thirds (67 percent) of police respondents said that they receive information from their state government, compared to 50 percent of fire and 33 percent of EMS respondents. In turn, 71 percent of police, 67 percent of fire, and 47 percent of EMS respondents reported receiving adequate cooperation from their state. However, only a third (33 percent) of police, 20 percent of fire, and 13 percent of EMS respondents said that they receive adequate funding from their state government.

Similar to the responses for the federal government, there were no substantial differences among respondents from jurisdictions of different populations regarding information and cooperation; however, only 12 percent of respondents from small localities of less than 5,001 people reported receiving adequate funding from their state, as did 13 percent of respondents from large jurisdictions exceeding 25,000 population, compared to 55 percent of respondents from mid-sized communities of 5,001 to 25,000 residents. Generally, respondents perceiving very-high to moderate probabilities of terrorism in their area also reported higher levels of adequate information, cooperation, and funding from their state government.

State Resources

Altogether, 50 percent of the respondents reported that state agencies have provided them with education, information, or technical assistance. This was most true of Lehigh County (65 percent) followed by Northampton County (47 percent) and Berks County (46 percent). Some 53 percent of EMS, 52 percent of police, and 47 percent of fire respondents reported such state aid. In turn, state assistance was cited by 45 percent of the respondents from small communities having less than 5,001 residents, 58 percent of the respondents from mid-sized communities of 5,001 to 25,000 people, and 47 percent of respondents from large jurisdictions exceeding 25,000 population.

Among respondents perceiving very-high to moderate probabilities of a terrorist attack in their area, 58 percent reported such state assistance compared to 46 percent of respondents perceiving low to very-low probabilities.

Not everyone who answered “yes” then followed up by citing specific agencies, but of those who did respond, Table 19 below shows that respondents receive education, information, or technical assistance from a wide array of state entities.

TABLE 19
State Agencies Providing Education, Information, or Technical Assistance

Have any state agencies provided you with education, information, or technical assistance? If yes, what organization is that?		
Response	% of Response	% of Respondents
Pennsylvania Emergency Management Agency (PEMA)	30.4%	36.9%
Pennsylvania State Police (PSP)	14.3	17.4
County government	8.9	10.9
State Fire Academy	8.9	10.9
Eastern Pennsylvania EMS Council	5.4	6.5
Pennsylvania Department of Health	5.4	6.5
Attorney General	3.6	4.3
New Jersey Department of Health and Senior Services	3.6	4.3
New Jersey State Police	3.6	4.3
Counterterrorism Task Force	1.8	2.2
Eastern District Attorney General Office of Pennsylvania	1.8	2.2
New Jersey Office of Emergency Management	1.8	2.2
Pennsylvania Chief of Police Association	1.8	2.2
Pennsylvania Department of Environmental Protection (DEP)	1.8	2.2
Pennsylvania Department of Transportation (PENNDOT)	1.8	2.2
Pennsylvania Office of Homeland Security	1.8	2.2
Pennsylvania Fire Commissioner	1.8	2.2
Pennsylvania Police Academy	1.8	2.2
Number of Responses / Respondents	56	46

Other Matters

Lastly, we asked an open-ended question: Is there anything else about your planning for terrorism, especially bioterrorism, that you would like to say that I have not asked?

The responses to this question are displayed in Table 20 below. To quote one respondent, “My major concern should an act of bioterrorism occur is dealing with the hysteria of the people and the logistics of getting necessary equipment and personnel into the area in which it is needed. This not only includes safety and medical equipment, it also includes the water and sanitary services that would be needed for a large number of people.” Another respondent asked, “What plans are being made to supplement infected or disabled emergency-service responders?” One respondent said, “This township is not prepared on many fronts. I believe my eight full-time and eight part-time police are prepared, but is the entire township ready? Where do you think folks will flee to when cities are impacted? To rural townships . . . We have large camping grounds, woods, mountains.”

TABLE 20
Open Response Regarding Terrorism and Bioterrorism Planning

Is there anything else about your planning for terrorism, especially bioterrorism, that you would like to say that I have not asked?		
Response	% of Response	% of Respondents
“ No”	60.3%	62.1%
Require more funding, training, equipment	20.6	21.2
Need for greater cooperation on all levels	5.9	6.1
Some cooperation at lower levels	4.4	4.5
Have not thought about it	4.4	4.5
How to accommodate infected or disabled first responders	2.9	3.0
Will treat bioterrorism efforts as we would a HAZMAT response	1.5	1.1
Number of Responses / Respondents	68	66

Conclusion

Overall, the state of preparedness to respond to major acts of terrorism and bioterrorism in the Greater Lehigh Valley-Warren County region is low to moderate, according to the region's first responders, with preparedness for bioterrorism being even lower than preparedness for conventional terrorism. Since September 11, 2001, bioterrorism is not a new or high budget priority in the region; very little has been expended on preparing for bioterrorist attacks; first responders do not believe they are receiving adequate funding assistance from the state and federal governments; very little equipment has been purchased for bioterrorism; and very few practice drills have been executed for bioterrorism responsiveness.

The survey results also suggest that fire and especially EMS responders have weaker preparedness levels and response capacities than police, even though fire and EMS units will be crucial and central in responding to bioterrorism. This weaker capacity is due, in part, to the different status of police compared to these other responders. While most police are full-time and part-time employees, most fire and EMS personnel in the region are volunteer personnel. Although these volunteers are trained and highly motivated, they have less time, money, and administrative capacity to enhance preparedness. In fact, they often need to devote considerable time to fundraising just for regular operations. Consequently, this largely volunteer response-sector would be severely strained by a major bioterrorist attack. In addition, the federal government has placed great emphasis, as well as funding, on trying to prevent terrorism by working with state and local police to investigate suspected terrorist organizations and apprehend suspected terrorists. Responding to bioterrorism after attacks has received less emphasis.

At the same time, however, these disturbing findings should be interpreted with some caution, for several reasons.

First, the survey results indicate that some movement has been made toward greater preparedness. Most first-response organizations have educated personnel and enhanced communication capabilities. Slightly more than half have implemented joint-response programs, and these programs are reported to be successful. Most first-response organizations have good relations with the federal and state governments in terms of information and intergovernmental cooperation, and at least half report that federal and state agencies have provided them with education, information, or technical assistance.

Second, although we have no precise data with which to compare our region with other regions across the country, various research reports suggest that bioterrorism preparedness is low in most regions. More highly prepared regions tend to be those that have already experienced terroristic events and/or major public-health emergencies arising from natural disasters and special mass-public events.

Third, no one is certain of the appropriate level and type of preparedness needed for terrorism, especially bioterrorism. It is difficult to make this determination. Most first responders have no experience with bioterrorism. They have experience with hazardous-materials events (HAZMATs) and, therefore, know the appropriate levels and types of preparedness needed for various HAZMAT incidents.

Indeed, one respondent wrote, “We will handle incidents of bioterrorism as we do HAZMATs. Since we do not know what the form of terrorism will be next, we must treat them as we do HAZMATs.” This might be a helpful, initial frame of reference for viewing bioterrorism, but a major bioterrorist attack would be quite different from a conventional HAZMAT incident.

Fourth, an interesting finding of this survey is that while only 7 percent of the respondents believe that the probability of a major terrorist attack in our region is high to very high, 33 percent believe that there is a high to very-high probability that our region will need to respond to people fleeing into our region from a major terrorist attack elsewhere. Hence, our region’s first responders are perhaps more likely to be second responders. Although this may be a more advantageous position than being ground zero, nevertheless, a massive in-flight of refugees from a terrorist or especially bioterrorist attack elsewhere would be a grave threat to the health and safety of our region’s citizens and would place enormous service burdens on all of our region’s public and private facilities.

Fifth, first responders, no matter how well prepared, invariably want to be better prepared. Having intimate knowledge and day-to-day experience with their response systems, they are keenly aware of weaknesses, gaps, and problems and, thus, likely to highlight those problems knowing that we could be better prepared. Consequently, the survey results should not be interpreted to mean that the Greater Lehigh Valley-Warren region is unprepared but only that it is probably inadequately prepared for bioterrorism. Just how inadequately prepared, though, would depend on the magnitude of a bioterrorist attack.

Finally, an important finding of this survey is that the level of bioterrorism preparedness is apparently related to the perceived probability of a terrorist attack in the region or in-flight from terrorism elsewhere. That is, the lower the perceived probability of an attack or in-flight, the lower the level of preparedness. This finding is of major public-policy significance and points to what, in the final analysis, is the key public-policy questions that need to be addressed by the people and elected officials of the region, namely: What levels and types of bioterrorism risks, including panic-causing hoax risks, do we face in the Greater Lehigh Valley-Warren County region; what levels and types of bioterrorism preparedness are we willing to support with our time and tax dollars; and how can we best prepare for bioterrorism in ways that have multiple-use benefits for public health and safety generally?

Survey Methodology

This survey was conducted in January and February 2003 by mail, fax, and in person. The questionnaire was sent to all 302 first-responder organizations that could be identified through public records and personal contacts in Berks, Lehigh, and Northampton Counties in Pennsylvania and in Warren County, New Jersey. These entities included law-enforcement and fire personnel (mostly police chiefs and fire chiefs), emergency medical services (EMS) personnel, local hospital managers, and emergency-management coordinators.

Altogether, 54 questionnaire responses were received via telephone interviews; another 21 were received by fax, 26 by mail, and one in-person—for a total useable response rate of 34 percent. The response rate in Pennsylvania was 30 percent for Berks County, 40 percent for Lehigh County, and 44 percent for Northampton County. The overall response rate was reduced considerably by the 7 percent response rate (5 of 71 possible responses) for Warren County, New Jersey. The small response from Warren County was not due to lack of cooperation or willingness but, rather, to the fact that New Jersey has structured its emergency-management system differently from Pennsylvania. The Garden State has located more responsibility in county government, compared to the Keystone State; consequently, virtually all of the local first-responders in New Jersey advised us to contact the Warren County Office of Emergency Management. Therefore, while the responses received from Warren County are included in the Total columns of the results presented in the tables of this report, results from Warren County are not presented in a separate county column along with the results reported from Berks, Lehigh, and Northampton Counties.

The survey results should be treated as suggestive and indicative because the final set of responses does not reflect a true representative sample of potential respondents in the four counties. However, the overwhelmingly uni-directional responses to most of the survey questions suggest that while the particular percentages of responses are less exact than desirable, the overall portrait of the state of preparedness of the Greater Lehigh Valley-Warren County region is rather accurate.

As an initial survey, moreover, it was not possible to address all pertinent issues. The main purpose of the survey was to “get the lay of the land” and to provide a general, informed assessment to the public, elected officials, and first responders about the our region’s state of preparedness. Many issues remain unaddressed and questions unanswered—all of which would benefit from further research and public dialogue.

Questionnaire

Good Morning/Afternoon. My name is _____ from the Meyner Center for the Study of State and Local Government at Lafayette College in Easton, Pennsylvania. I'm conducting a brief survey from the Center in order to identify the state of local preparedness of our region to respond to terrorism. We will issue a public report on the survey results in late March. In addition, the Meyner Center will host a public forum on bioterrorism in April. We would really appreciate your input, and rest assured that your responses will remain confidential. We will not identify you or your organization in any public materials. So, may I ask you a few questions?

- 1) In your opinion, what is the probability of a terrorist incident involving 200 or more victims occurring in your organization's region — very high, high, moderate, low, or very low?
1. Very High _____ 2. High _____ 3. Moderate _____ 4. Low _____ 5. Very Low _____
- 2) What do you think is the probability that your organization will be required to respond to people fleeing into your area from a terrorist incident in a nearby area, such as New York City, Philadelphia, or Harrisburg — very high, high, moderate, low, or very low?
1. Very High _____ 2. High _____ 3. Moderate _____ 4. Low _____ 5. Very Low _____
- 3) How would you categorize your level of preparedness to respond to terrorist incidents such as those previously mentioned — very high, high, moderate, low, or very low?
1. Very High _____ 2. High _____ 3. Moderate _____ 4. Low _____ 5. Very Low _____
- 4) How would you categorize your level of preparedness to respond specifically to bioterrorist incidents — very high, high, moderate, low, or very low?
1. Very High _____ 2. High _____ 3. Moderate _____ 4. Low _____ 5. Very Low _____
- 5) In what ways are you best prepared to respond to bioterrorism?
- 6) In what ways are you least prepared to respond to bioterrorism?
- 7) In regard to measures of preparation, has your organization:
- 8) Purchased equipment?
1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 9) Educated personnel?
1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 10) Executed practice drills?
1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)

- 11) Enhanced communication capabilities. For example, wireless communications, telephone lines, and online computer databases?
 1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 12) Have you implemented any joint-response programs with other agencies or communities?
 1. Yes _____ (*If yes, go to question 13*) 2. No _____ (*If no, go to question. 27*)
 3. Other _____ (*Explain in detail*)
- 13) If so, with whom are you cooperating?
 How about the State Police?
 1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 14) National Guard?
 1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 15) Municipalities?
 1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 16) Neighboring Police Departments?
 1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 17) Neighboring Fire Departments?
 1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 18) Hospitals?
 1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 19) Regional Red Cross Office?
 1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 20) Regional PEMA Office?
 1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 21) Regional FEMA Office?
 1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 22) EMS?
 1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 23) How about any other organizations I haven't mentioned?

- 24) Overall, has such cooperation been successful?
 1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 25) If no, for what reasons? (*Please explain in detail*)
- 26) How are you financing such joint – response programs?
 (*Please explain in detail*)
- 27) Since September 11, 2001, has your organization made terrorism a new budget priority?
 1. Yes _____ (*If yes, go to question 28*) 2. No _____ (*If no, go to question 29*)
- 28) If yes, would you say that your budget priority for terrorism is:
 1. Very High _____ 2. High _____ 3. Moderate _____ 4. Low _____ 5. Very Low _____
- 29) How much has your organization spent on bioterrorism efforts since September 11, 2001?

- If response is “none” then go to question 37.**

- 30) From what sources has your organization received funding to prepare for bioterrorism?
 How about your own local government? (*own state government for state troopers*)
 1. Yes _____ 2. No _____
- 31). County Government?
 1. Yes _____ 2. No _____
- 32) State Government?
 1. Yes _____ 2. No _____
- 33) Federal Government?
 1. Yes _____ 2. No _____
- 34) Non-profit Organizations?
 1. Yes _____ 2. No _____
- 35) Private Corporations?
 1. Yes _____ 2. No _____
- 36) Other Funding?
 1. Yes _____ (*If yes, please explain in detail*) 2. No _____

- 37) Do you believe you are receiving adequate information regarding terrorism from the federal government?
1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 38) Do you believe you are receiving adequate cooperation regarding terrorism from the federal government?
1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 39) Do you believe you are receiving adequate funding regarding terrorism from the federal government?
1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 40) Do you believe you are receiving adequate information regarding terrorism from the state government?
1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 41) Do you believe you are receiving adequate cooperation regarding terrorism from the state government?
1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 42) Do you believe you are receiving adequate funding regarding terrorism from the state government?
1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 43) Have any federal agencies provided you with education, information, or technical assistance?
1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 44) If yes, what organization is that? _____
- 45) Have any state agencies provided you with education, information, or technical assistance?
1. Yes _____ 2. No _____ 3. Other _____ (*Explain in detail*)
- 46) If yes, what organization is that? _____
- 47) Is there anything else about your planning for terrorism, especially bioterrorism, that you would like to say that I have not asked? (*Explain in detail*)