ABSTRACT
A review of the literature shows that terrorism response plans exist but are lengthy. This is a concern because, in response to a weapons of mass destruction (WMD) incident, responders must be aware of the master plan. It is unlikely that all first responders will have a working knowledge of lengthy master plans; consequently, a situation could arise where responders would not be working together. To mitigate catastrophic inefficiency, a high-consequence event decision matrix was created to classify all high-consequence incidents at different severity levels and describe the necessary emergency actions first responders must employ.

INTRODUCTION
Two methods exist in combating terrorism. These methods are preparedness/prevention and response. Unfortunately, even with the most efficient system of terrorism prevention, a terrorist needs to be successful only one time out of 100. Luck and strategy could be the potential terrorist’s most powerful tools. Because of this inherent vulnerability, considerable effort must be placed in terrorism response planning.1

When considering issues of terrorism, the first question is how the nation responds to possible threats from weapons of mass destruction (WMD). In an effort to better define the threats that this country faces from WMD, the federal government has identified five main categories: biological, nuclear, incendiary, chemical, and explosive (B-NICE). The B-NICE acronym was developed to educate the public in WMD terrorism.2 The B-NICE view of WMD threats is both concise and publicly usable. Apart from these conceptual definitions of what to expect in a WMD terrorist attack, there are few practical resources available for use while they’re occurring.

EXISTING TERRORISM RESPONSE PLANS
The greatest weakness of terrorism response planning is that, despite the broad definitions provided by B-NICE, planning for every possible method of attack is nearly impossible. Prior to 9/11, very few members of the public considered the use of commercial airplanes as a means of attack.3 Since the form and time of the next terrorist attack cannot be predicted, response planning must be generalized so that the principles detailed in the plans can be extended to both foreseen and unforeseeable threats. The terrorism response planner must avoid producing plans that are too narrowly focused or so general that they are useless.

Existing emergency operations plans, like the Commonwealth of Virginia Emergency Operations Plan, Volume 8,4 are thorough examinations of all of the operational needs that must be met during a response to a terrorist incident. This plan in particular offers detailed checklists and organizational charts of operations. It also incorporates details about specific duties for Virginia government agencies that would be affected by a terrorist event.

However, concerns arise when there are no quick reference operation plans available for first responders. Though the plans appear comprehensive, a thorough review raises questions such as who will be responsible for managing a real-time mass evacuation and which office will be the sole source of information for the media and the public. Questions at this level of detail go unanswered in most terrorism response
<table>
<thead>
<tr>
<th>Level</th>
<th>Category A</th>
<th>Category B</th>
<th>Category C</th>
<th>Nuclear</th>
<th>Radiological</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Biological</td>
<td></td>
<td></td>
<td>surface burst</td>
<td>incident</td>
</tr>
<tr>
<td>Level 4</td>
<td>Category A pathogen. Moderate infection rate over a medium geographic area. Moderate casualties, low mortality. Minimal to moderate second generation infection. (2)</td>
<td>Category B pathogen. Moderate infection rate over a medium geographic area. Moderate casualties, low mortality. (4)</td>
<td>Category C pathogen. Moderate infection rate over a medium geographic area. Moderate casualties, low mortality. (4)</td>
<td>Detonation of a 11-50 kiloton yield nuclear bomb resulting in a 750 to 1,300 foot wide crater. Lethal for 50 percent of population/thermal exposure 3 miles from incident. (1)</td>
<td>Release of between 350 R and 450 R total dose in the most concentrated area. Lethal for 5 percent of exposed within a month without medical attention. (1)</td>
</tr>
<tr>
<td>Level 3</td>
<td>Category A pathogen. High infection rate over a medium geographic area. Moderate to high casualties and low to moderate mortality. Moderate second generation infection. (1)</td>
<td>Category B pathogen. High infection rate over a medium geographic area. Moderate to high casualties and low to moderate mortality. (3)</td>
<td>Category C pathogen. High infection rate over a medium geographic area. Moderate to high casualties and low to moderate mortality. (3)</td>
<td>Detonation of a 51-100 kiloton yield nuclear bomb. Resulting in a 1,300-1,650 foot wide crater. Lethal for 50 percent of population. Thermal exposure 4 1/4 miles away from incident. (1)</td>
<td>Release of between 450 R and 650 R total dose in the most concentrated area. Lethal for 50 percent of population for those exposed without medical attention. (1)</td>
</tr>
<tr>
<td>Level 2</td>
<td>Category A pathogen. Moderate infection rate over a large geographic area with a heavy concentration in one or more areas. High casualties and moderate fatalities. High second generation infections. (1)</td>
<td>A Level 2 Category B incident is unlikely based on characteristics of a Category B pathogen.</td>
<td>Category C pathogen. Moderate infection rate over a large geographic area with a heavy concentration in one or more areas. High casualties and moderate fatalities. (2)</td>
<td>Detonation of a 101-500 kiloton yield nuclear bomb. Resulting in a 1,650-2,800 foot wide crater. Lethal for 50 percent of population. Thermal exposure 5 1/2 miles away from incident. (1)</td>
<td>Release of between 650 R and 1000 R total dose in the most concentrated area. Lethal for most people. (1)</td>
</tr>
<tr>
<td>Level 1</td>
<td>Category A pathogen. High infection rate over a large geographic area. High casualties and high mortality. (1)</td>
<td>A Level 1 Category B incident is unlikely based on characteristics of a Category B pathogen.</td>
<td>Category C pathogen. High infection rate over a large geographic area. High casualties and high mortality. (1)</td>
<td>Detonation of a 501 kiloton to 25 megaton yield nuclear bomb. Resulting in a 2,800-4,800 foot wide crater. Lethal for 50 percent of population. Thermal exposure 8 1/2 miles away from incident. (1)</td>
<td>Release of &gt; 1000 R total dose in the most concentrated area. Results in irreparable damage to central nervous system cells and death within hours to days. (1)</td>
</tr>
</tbody>
</table>

(1) = Relatively severe demand on resources and response capabilities; (2) = Relatively major demand on resources and response capabilities; (3) = Relatively moderate demand on resources and response capability; (4) = Relatively minimal demand on resources and response capability; (5) = Relatively minor demand on resources and response capability.
Table 1. The High-Consequence Event Decision Matrix (continued)

<table>
<thead>
<tr>
<th>Incendiary</th>
<th>Chemical</th>
<th>Explosive</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Level 5 incident, unlikely because it is indistinguishable from &quot;normal&quot; everyday incidents. (1)</td>
<td>Material does not indicate any atmospheric hazard. Splashes and direct inhalation are avoided. Applies to any size geographic area. (5)</td>
<td>A single, small-scale explosion near a sensitive target. Minor to moderate damage to target. Low loss of life immediately around explosion. (4)</td>
</tr>
<tr>
<td>Fires resulting in moderate to heavy damage to nearby buildings. (3)</td>
<td>Material will not adversely affect skin or be absorbed by skin. Type of chemical can be removed from atmosphere by air-purifying respirator. Atmosphere contains at least 19.5 percent oxygen. Applies to any size geographic area. (4)</td>
<td>Multiple explosions within close proximity to each other or a single medium explosion on multiple sensitive targets or a single universal target. Causing moderate to major damage to target. Minor to moderate damage to nearby structures. (3)</td>
</tr>
<tr>
<td>Fires resulting in heavy loss of life immediately surrounding intended targets, to major structural damage to nearby buildings. (2)</td>
<td>Material requires high level of respiratory protection but less skin protection. Atmosphere contains less than 19.5 percent oxygen. Vapors, gases, or particles are not known to contain high levels of chemicals harmful to the skin. Applies to any size geographic area. (5)</td>
<td>Multiple explosions within close proximity to each other or a single large explosion involving multiple sensitive targets or a single highly sensitive target. Heavy loss of life around target and moderate to major damage to nearby structures. (2)</td>
</tr>
<tr>
<td>Fires resulting in heavy loss of life immediately surrounding intended targets, major structural damage to targets, and minor structural damage to nearby buildings. (1)</td>
<td>Material requires highest level of protection for skin, eyes, and respiratory system based on measured or potential high concentration of vapor, gases, or particles in a small to medium geographic area. (2)</td>
<td>Multiple large explosions within close proximity to each other on multiple highly sensitive targets or multiple universal targets. Heavy loss of life around target; major to severe damage to nearby structures. (1)</td>
</tr>
<tr>
<td>Fires resulting in heavy loss of life immediately surrounding intended targets, major structural damage to targets, and minor structural damage to nearby buildings and extended geographic area. (1)</td>
<td>Material requires highest level of protection for skin, eyes, and respiratory system based on measured or potential high concentration of vapor, gases, or particles in a large geographic area. (1)</td>
<td>Multiple large explosions within close proximity to each other on multiple highly sensitive targets or multiple universal targets. Heavy loss of life around target, severe damage to nearby structures. (1)</td>
</tr>
</tbody>
</table>

plans. Because of the unpredictable nature of terrorist attacks, planning specific responses is a daunting task. Even so, these elements must be addressed so that appropriate officials are aware of their roles in the overall response effort.

An additional question arises with terrorism response plans of this nature: do all the players who are involved in the response process have a working knowledge of the plan? Because of the length necessary for terrorism response plans like Virginia’s, it is unlikely. To remedy the problem, supplemental documents that consolidate the content of existing terrorism response plans must be provided to responders so that they have a working knowledge of the master plan.

METHODS AND RESULTS

Though it is nearly impossible to anticipate all the possible methods of terrorist attack, the methods for response are fairly straightforward: to provide immediate relief after disaster strikes and help individuals and communities recover from the effects.5 The High-Consequence Event Decision Matrix introduced in this paper is a possible resolution for some of the problems of terrorism response planning that have been illustrated in other plans or that have yet to be addressed in a singular document (Table 1).

MATRIX COMPOSITION

The matrix comprises four primary components. First, it attempts to resolve the ambiguity in the wide range of possible WMD threats. It accomplishes this by establishing definitions for five levels of severity of a WMD event. It then establishes each level of severity according to independent filters of information. The types of information for each filter should be available immediately or shortly after an attack occurs. The only exceptions to this are biological agents because of the time delay it takes for symptoms to appear and be recognized as evidence of a terrorist attack.6 When a presiding authority, either the president or a state governor, declares specifically what kind of incident has occurred, that declaration initiates the first responder and public actions. Once the terrorist incident is defined by the parameters of the decision matrix, responders
implement the second component, the emergency actions matrix (Table 2).

The third component of the decision matrix is the personal protective action matrix, which is a tool for first responders to indicate whether public protective actions like evacuation, shelter-in-place, community shielding, or decontamination are appropriate. Finally, the fourth component is a historical examples matrix that is a characterization of WMD events in the context of the event matrix. The historical examples matrix (not shown) helps the user determine the relative gravity of a WMD incident.

**MATRIX USE METHODOLOGY**

In order to understand how to properly use the event matrix, some direction is necessary. The matrix is organized into a series of rows and columns that incorporate severity data from the B-NICE categories. An understanding of the matrix is based on examining each column individually. Every column has its own separate filter for establishing the severity level of a terrorist incident. The implication of this is that the Event Matrix cannot be read from left to right. For example, a Level 4 biological event is not comparable to a Level 4 chemical event. To assist in the interpretation of the decision matrix in the appropriate top to bottom fashion, a colored guide can be applied. These colors would represent the relative demand on resources and response capabilities. Each individual color would represent either a minimal, minor, moderate, major, or severe demand. (Due to publication considerations, the coloring was replaced with a numbering guide for the matrix, but the colors would be reapplied for use in operations.) The language in the matrix pertaining to damage assessments and resource demands are deliberately vague to allow the use of the matrix in both major metropolitan areas and areas with lesser population density.

The organization of the row structure in the decision matrix is divided by five levels of severity on the left and the five types of B-NICE WMD threats on the top. The reason for organizing the severity levels in descending order, where a Level 5 is the least severe and a Level 1 is the most severe, is to model the matrix after the US Interagency Domestic Terrorism Concept of Operations Plan (CONPLAN). The CONPLAN incorporates the severity levels of a terrorist threat in descending order.

The use of the B-NICE acronym to define the all threats element of the decision matrix complies with the existing acronym characterization used by the Federal government and the first responder community. However, to be more specific for both the emergency actions and the use of filters, some subcategories were needed. The two B-NICE subdivisions are biological and nuclear. The biological category is subdivided into three categories of pathogens that can be used in a biological attack. For the nuclear category, a distinction was made between nuclear bombs and a radiological incident.

Another direction for the use of the decision matrix involves a site-specific classification rather than a national or even a regional classification. It is possible to have different level threat incidents in different areas in an entire city; however, if there are multiple related incidents, a judgment can be made by the presiding authority about whether or not the demand for response resources necessitates an elevation in the incident severity level. For example, if there were multiple Level 5 explosions in a region, the presiding authority could designate all incidents as Level 4 because of the coincidence and demand on resources. An example of this can be found in the historical examples matrix in the explosive category. One such example is the Madrid train bombings, which collectively would be considered a Level 4 event, but individually as Level 5.

**EMERGENCY ACTIONS MATRIX**

Once the terrorist event has been classified and declared, the emergency actions matrix (Table 2) will then be utilized. Here, the emergency response is divided into four basic forms of response: Incident Command, Public Health, Security, and Fire/HAZMAT. These four components of emergency response generally cover the immediate response to the actual terrorist incident.

The role of the incident command component of the emergency actions matrix is to incorporate leadership
of the terrorism response operation. Without a general understanding of the role of the command structure and responsibilities, the leadership structure will segment. This segmentation will result in a broken and ultimately inefficient response group. The inherent benefit of a single command and control group has been echoed in the DHS National Incident Management System. This system was the basis for the incident command element of the emergency action matrix. The 9/11 Commission Report has also emphasized the need for an efficient command and control structure: “Effective decision making in New York was hampered by problems in command and control and in internal communications.” Also, a report conducted by the McKinsey & Company group regarding the Fire Department of New York City response to the 9/11 terrorist attacks revealed a weakness in command, control, and communications. Specifically, individual units that were not directed toward central staging areas did not receive necessary information about entering the towers, and dispatch could not accurately track the whereabouts of each unit. The incident command component provides centralized control. Without clear and continuous direction from an established and accountable command structure, any response operation will be severely handicapped.

The health element addresses the serious public health issues associated with all of the B-NICE WMD. For example, a biological incident carries quarantine and mass immunization issues, and a chemical incident involves decontamination and mass care of an exposed population. The security piece is commonly known as law enforcement actions. This form of response is identified as security, because it allows for the involvement of military support that could be employed in later stages of an emergency response. The Fire/HAZMAT role is essential in most incidences. Effective response after 9/11 depended largely on the fire-responsive capabilities, which coordinated search and rescue operations among other response needs.

The purpose of including all four of these response groups into the same matrix is to improve upon the lengthy response plans. As stated earlier, though necessary, a lengthy terrorism response plan will not be well known among the entire emergency response community. Assuming the plan is adopted by a local jurisdiction, each component group of the plan will only know what they need to do. This lack of information could easily result in a case of the left hand not knowing what the right is doing. Instead, the decision matrix provides a quick reference that shows the emergency services where their specific response fits into the master plan and what their colleagues in different areas of response are doing. For example, when the president declares that a Level 3 chemical incident has occurred, it is very easy for the media to outline what is being done immediately to respond to the incident. Public confidence is bolstered when clearly, consistently accurate information is provided.

Though the actions outlined in the decision matrix are too general to be logistically implemented, they provide a guide for all aspects of appropriate emergency response. Another application of this portion of the matrix is that local jurisdictions could easily identify a single public information officer for each area of response. This customizability would enable the public and other branches of emergency response a single point of contact for more specific information about actions being undertaken.

**PUBLIC PROTECTIVE ACTION MATRIX**

The public protective action matrix (Table 3) details the measures that need to be taken by members of the public in response to varying levels of WMD severity. This component of the decision matrix also divides the response into four categories: evacuation, shelter-in-place, community shielding, and decontamination.

The evacuation element is almost inevitable in any B-NICE WMD event. The scope of the evacuation is the primary variable. For example, a Level 5 explosive event will require the evacuation of the population in immediate risk of the resulting fires and unstable structures near the blast. However, a Level 1 radiological incident will require the complete evacuation of a population for many miles away from the source of the exposure.

Primarily, a shelter-in-place order is issued for
Table 2. High-Consequence Event Decision Matrix: Emergency Actions

<table>
<thead>
<tr>
<th>Category A</th>
<th>Category B</th>
<th>Category C</th>
<th>Nuclear surface burst</th>
<th>Radiological incident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incident command: Initiate ICS structure and establish a Unified Command POC. Assess communications needs and logistics requirements. Begin planning for long-term recovery needs. Execute necessary coordination with regional mass care resources. Appoint a single public information officer for a single point of contact with media.</td>
<td>Incident command: Initiate ICS structure and establish a Unified Command POC. Assess communications needs and logistics requirements. Begin planning for long-term recovery needs. Evaluate need for regional mass care resources. Appoint a single public information officer for a single point of contact with media.</td>
<td>Incident command: Initiate ICS structure and establish a Unified Command POC. Assess communications needs and logistics requirements. Begin planning for long-term recovery needs. Evaluate need for regional mass care resources. Appoint a single public information officer for a single point of contact with media.</td>
<td>Incident command: Initiate ICS structure and establish a Unified Command POC. Assess communications needs and logistics requirements. Begin planning for long-term recovery needs. Evaluate need for regional mass care resources. Appoint a single public information officer for a single point of contact with media.</td>
<td>Incident command: Initiate ICS structure and establish a Unified Command POC. Assess communications needs and logistics requirements. Begin planning for long-term recovery needs. Evaluate need for regional mass care resources. Appoint a single public information officer for a single point of contact with media.</td>
</tr>
<tr>
<td>Fire/HAZMAT: Support military actions if necessary and assist in evacuation and containment.</td>
<td>Fire/HAZMAT: Support military actions if necessary and assist in evacuation and containment.</td>
<td>Fire/HAZMAT: Support military actions if necessary and assist in evacuation and containment.</td>
<td>Fire/HAZMAT: Assist in evacuation from contaminated area. Enforce containment perimeter and assist with decontamination of equipment and victims.</td>
<td>Fire/HAZMAT: Assist in evacuation from contaminated area. Enforce containment perimeter and assist with decontamination of exiting equipment and victims.</td>
</tr>
</tbody>
</table>
Table 2. High-Consequence Event Decision Matrix: Emergency Actions (continued)

<table>
<thead>
<tr>
<th>Incendiary</th>
<th>Chemical</th>
<th>Explosive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incident command: Initiate ICs structure and establish a Unified Command POC. Assess communications needs and logistics requirements. Begin planning for long-term recovery needs. Consult with technical specialists (e.g., structural engineering, arson / forensics investigators). Appoint a single public information officer for a single point of contact with media. Assess damages.</td>
<td>Incident command: Initiate ICs structure if necessary and establish a Unified Command POC. Assess communications needs and logistics requirements. Begin planning for long-term recovery needs.</td>
<td>Incident command: Initiate ICs structure and establish a Unified Command POC. Assess communications needs and logistics requirements. Begin planning for long-term recovery needs. Evaluate need for regional resources and technical specialists regarding containment, public protective action needs, and medical treatment issues. Appoint a single public information officer for a single point of contact with media.</td>
</tr>
</tbody>
</table>

areas downwind from a hazardous airborne agent, but the concentration at a specified range does not pose a lethal risk to most people.14 Another condition that must be satisfied for a shelter-in-place order to be effective is the structures must be resistant to whatever airborne agent is present. Use of shelter-in-place has a long history of success, but little can be found in academic publication.15

The use of a shelter-in-place order for a public response to a WMD terrorist attack would largely be used in the event of a chemical incident16; however, other applications could be extended to other forms of WMD. For example, in an explosive/incendiary event, areas downwind of a large smoke plume would need to shelter-in-place. The main form of shelter-in-place for a nuclear event would only be in approved fallout shelters, which is different from a chemical shelter-in-place order.17 The use of shelter-in-place in a biological event is the second reason it is utilized in the protective action matrix. Since, most structures will not offer any protection from an airborne environmental bioagent, the shelter-in-place order carries different uses. Primarily, the two uses for a shelter-in-place order are to help control an evacuation and to help enforce quarantine/isolation situations.18 Admittedly, there is less likelihood a shelter-in-place order could be used for controlling an evacuation because of public fears of contracting a bioagent, but it could be a viable way of conducting a mass quarantine.

The community shielding element in the protective action matrix is a relatively new concept whose primary purpose is to help control a “shadow evacuation” phenomenon.19 Community shielding is in many ways a psychosocial version of shelter-in-place.20 People tend to evacuate when there is no threat to their location. In
this case, specific messaging, information centers, and other psychosocial supportive actions would be taken to try and keep people in a likely shadow evacuation area, off the major evacuation routes, and in their communities. Because the decision matrix most likely will be used in major metropolitan areas, likely targets for a WMD terrorist event, the populations are large enough to warrant the incorporation of community shielding as a part of the public response requirement matrix.\textsuperscript{21}

A final component of the protective action matrix is decontamination. Decontamination is an essential component of the public protective actions for a particulate agent. Examples of agents that require decontamination include all chemical agents, radiation agents, some biological agents, and elements projected by explosion or fire.

There has been a great deal of research conducted regarding the best methods of mass decontamination. The most undeniable result of this research is that any person or group of people must be decontaminated to limit the spread of the agent.\textsuperscript{22} This is especially true for decontamination of people entering a public shelter or healthcare facility. The specific methods of decontamination will not be outlined, but, generally speaking, the methodology is flush-strip-flush-run.\textsuperscript{23} This method involves flushing a person with water, then stripping his or her clothes and flushing the skin, and then having the person run out of the area. For the decontamination of mass populations some discussion exists on whether self-decontamination should be exercised for those not needing medical attention. The purpose of this approach is to free up decontamination personnel to accelerate the decontamination process.\textsuperscript{22}

**HISTORICAL EXAMPLES MATRIX**

Although not shown in this article, the historical examples matrix was added to provide a context for the decision matrix. Providing historical examples that fit into the criterion specified in the decision matrix allows the user to have a practical way of relating a current WMD event to comparable disasters. This way, any level user of the decision matrix can look at a developing terrorist incident and be able to get a practical idea about what needs to be done to manage it based on how it was managed in the past.\textsuperscript{24}

**DISCUSSION**

The role of the High-Consequence Event Decision Matrix is to provide both a definition and a starting point in WMD response. As detailed earlier, there is a lack of standardization in articulating what degrees of WMD events exist between the best and worst case scenarios. The decision matrix fills that gap. Using widely accepted filters for determining the severity of B-NICE events, the matrix pulls all of the noncontiguous definitions of B-NICE WMD events into a single frame. Two advantages are improved organization of WMD response options and psychosocial benefits.

The first advantage of the matrix is organizational. The decision matrix provides the first responder community with an immediate guide concerning appropriate reactions and division of responsibility to a WMD event. By providing this guide, first responders are not independent entities doing whatever their supervisor deems to be a priority. Instead, the entire response is immediately coordinated, even if the level of the coordination is not directed through communication. If every element of the plan is a working concept of the master plan, each component will be embedded in a pre-existing coordinated plan.\textsuperscript{25}

The second advantage of the decision matrix is psychosocial. The matrix supplies clear, consistent, and accurate information to the public. The lack of this clarity in the past has been the leading cause of both shadow evacuations and noncompliance with government orders for public protective action.\textsuperscript{26,27} This will guarantee failure for any evacuation effort in a major metropolitan area.

The manner by which the decision matrix provides these benefits to the public is twofold. First, by creating a standardized view of B-NICE WMD events, there is little opportunity for interpretation or media exploitation of the event.\textsuperscript{28} The standardization reduces the media’s capacity for sensationalizing an event because the president or a state governor, being in positions of authority, will limit the discussion during the emergency period about what exactly is going on. Much like the media’s response to the
### Table 3. High-Consequence Event Decision Matrix: Public Protective Action

<table>
<thead>
<tr>
<th>Biological</th>
<th>Nuclear</th>
<th>Radiological incident</th>
<th>Incendiary</th>
<th>Chemical</th>
<th>Explosive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category A</strong></td>
<td><strong>Category B</strong></td>
<td><strong>Category C</strong></td>
<td><strong>Nuclear surface burst</strong></td>
<td><strong>Evacuation response:</strong></td>
<td><strong>Shelter-in-place</strong> response:</td>
</tr>
<tr>
<td>Evacuation response: Evacuation orders given for areas surrounding high infection area and areas where growth is anticipated to occur.</td>
<td>Evacuation response: Evacuation orders given for areas surrounding high infection area and areas where growth is anticipated to occur.</td>
<td>Evacuation response: Evacuate contaminated area. Establish decontamination areas at points of exit along perimeter.</td>
<td>Evacuation response: Evacuate areas of immediate or anticipated threat.</td>
<td>Evacuation response: Evacuate areas of immediate or anticipated threat.</td>
<td>Evacuation response: Evacuate areas of immediate or anticipated threat.</td>
</tr>
<tr>
<td>Decontamination: Immediately rinse with water and soap only if endospore agents are suspected.</td>
<td>Decontamination: Immediately rinse with water and soap only if endospore agents are suspected.</td>
<td>Decontamination: Immediately facilitate movement of victims from hot zone and into decontamination zone. Place all inanimate objects in drop-off area for radiation screening. Enter decon area to wash and rinse body.</td>
<td>Decontamination: No decontamination necessary.</td>
<td>Decontamination: Immediately leave continuous exposure to hazard. Execute heavy rinsing of exposed victims to any uncontaminated water source if nerve, blood, blister, or choking agent is suspected. Encourage self-decontamination for those able to reduce personnel strain.</td>
<td>Decontamination: Rinse with water only if covered with dust.</td>
</tr>
<tr>
<td><strong>Level 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Shelter response:</strong> Shielding response: Shelter order issued for areas outside of evacuated areas.</td>
<td>Shielding response: Shelter order issued for areas outside of evacuated areas.</td>
<td>Shielding response: Initiate shielding for areas outside of irradiated area.</td>
<td>Shielding response: No shielding order necessary.</td>
<td>Shielding response: No shielding order necessary.</td>
<td>Shielding response: No shielding order necessary.</td>
</tr>
</tbody>
</table>
national terror threat levels, when the DHS orders a change in the threat level, the media and jurisdiction officials do not question the fact that the threat level has changed, only why it has changed. By mitigating the media’s ability to exacerbate an already terrifying situation for the public, the public response will be much more constructive than what it would be otherwise.

The second benefit is that the decision matrix contributes constructively to the public’s decision-making process. For example, if a Level 2 chemical incident occurs, the protective action matrix will provide a rational explanation for why the government has made an order for their locality.

In summation, the High-Consequence Event Decision Matrix provides the terrorism response effort with a standardized and clear outline for both responders and victims. The decision matrix complements existing terrorism response plans by consolidating the content so that, when time is critical, the master plan can be understood by the entire responsive body. The decision matrix fills a knowledge gap that is unacceptable in terrorism response.

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REFERENCES


