Public Health Response to Unidentified Substance

This protocol is to be used for the Public Health component in the investigation and response to a potential BT event such as a white powder incident, unidentified toxic substance exposure, etc. It is meant to be used by Public Health entities (local and state) but is also meant to be an integrative protocol. It should be integrated and incorporated into response protocols within Public Health agencies, Fire/Rescue/EMS/HazMat and law enforcement agencies.

**Background**

* The fundamental goal of public health is to prevent injury and illness to an individual and to the community.
* In the post-2001 era, public health has taken on additional responsibility as an emergency response component and integrates further with law enforcement and Fire/Rescue*/*EMS/HazMat.
* Public Health has not only additional responsibilities but also additional resources to bring to the field of response including but not limited to investigation tools, preventative medications, public information messages, follow-up capacity, and laboratory resources.
* Public Health has established organizational capacity to respond to such incidents and, is accountable in its role of protecting the health and safety of the population.
* All response is locally driven. However, as incidents progress and/or as experience evolves, assistance in expertise, resources and authority may be available at the state and federal levels.
* Although every attempt will be made by all parties to share intelligence and background information, this is not always possible; therefore continuous flow of basic information that may have an impact on individual response is a necessity in an emergency response community.

**Local Health Departments**

* Will be notified of incidents immediately, or as soon as possible, in order to have necessary input into the evaluation of the incident. Depending on local protocol this may be through the 911 centers, units on the scene or the coordinating agency during the event. Late notification could result in inadequate resources, flow of information, and negative outcome to the person(s) exposed.
* Will assist in the evaluation of the event. Local Health Department (LHD) personnel will assist in making determination regarding the exposure credibility of the event per The Matrix\*. Determination of exposure credibility will assist in formulating recommendations re: prophylaxis therapy and laboratory testing.
* Will assist in facilitating discussions with Maryland Department of Health (MDH) Laboratories Administration (LA) personnel, as necessary, and will ensure HazMat screening for chemicals, explosives and radiation before transport of specimens to the MDH Laboratories Administration. Depending on local protocol, transportation of samples may be conducted by or through the LHD. In all cases, chain of custody must be maintained throughout collection and transportation.

\* See attached

* Samples referred to the MDH Laboratories Administration for testing will not be accepted unless the LHD is involved and part of the assessment process.
* Will notify the MDH MD On-Call (410-407-6154) immediately or as soon as possible. Notification should not be delayed beyond two hours. Notification will include at minimum: determination of clinical and criminal assessments, number of people potentially at risk, a recommendation on the need for prophylaxis, need for laboratory testing and the likelihood that the general public will become aware of the incident. The decision regarding the need for prophylaxis may be made in conjunction with MDH and may be a reason for early notification and involvement of MDH. Public awareness may be related to media coverage of the event, high profile location or parties involved, etc.
* Will follow any and all protocols regarding reporting and notification internal to the LHD and local response plans.
* Will follow up with response agencies regarding after action reviews to improve response and coordination.
* When laboratory results are received, will develop, as necessary, further response strategy with the assistance of MDH, as indicated.

**MDH MD On-Call**

* Will assist the LHD, as necessary, with determinations regarding the exposure credibility, determination of need for prophylaxis and laboratory testing.
* Will assist the LHD and other responder agencies, through communications with the LHD, regarding expertise specific to the potential agents, environmental surety, etc. This expertise may be as a result of specific knowledge or resources, may be related to specific law enforcement intelligence or other ongoing incidents, etc.
* If notified of an incident prior to being notified of the incident by the LHD, will contact the LHD through existing protocols. The LHD and the MDH MD On-Call will negotiate who will follow-up on the incident. It is always preferred that the LHD is the lead for health related issues affecting a single jurisdiction. However, in some circumstances MDH may take the lead.
* Will notify MDH leadership and response partners of the event. This communication will occur in the following fashions:
	+ According to the BT On-Call Emergency Communications Protocol for Health Alerts, Advisories, Notifications and Updates, a brief notification via text message will be sent.
		- Communication format will be according to the BT On-Call Emergency Communications Protocol for Health Alerts, Advisories, Notifications and Updates.
	+ As necessary, a conference call can be set up emergently to provide additional detailed information and to develop strategy should there be a major response.
	+ As necessary, a FRED alert can be posted if widespread dissemination is necessary.
* Will assure results are communicated to the LHD, MDH MD On-Call and the referral agency and will assist, as necessary, in developing an appropriate strategy to respond to these results.

**Maryland Department of Health (MDH) Laboratories Administration**

* Law Enforcement should determine the seriousness and credibility of the threat and, along with local public health officials, the potential for credible exposure. If Law Enforcement determines that there is both a credible threat and a credible exposure, then the 24/7 On-Call Contact Person for the Laboratories Administration, Office of Laboratory Emergency Preparedness and Response (OLEPR) should be called. The contact numbers, in order, are: during normal working hours: 443-681-3788/3787 (office) and 410-925-3121 (cell phone). After hours, the numbers to call, in order, are: 410-925-3121 (cell phone), and 410-408-7521 (pager).
* The OLEPR 24/7 On-Call Contact Person will obtain basic contact information to include: caller, agency, and contact phone number.
* The OLEPR 24/7 On-Call Contact Person will then contact the appropriate Laboratories Administration Division Chief (or their designee) and provide them with the contact information for them to call, obtain needed information, and answer any questions the submitter may have. The Division Chiefs (or designee) will assist and make recommendations regarding alternative testing locations or mechanisms at this time. Laboratories Administration scientists will advise when preliminary and final results should be expected.
* The Laboratories Administration Division Chief (or their designee) will then contact the OLEPR 24/7 On-Call Contact Person and inform him of the results of their call (type and number of samples, when they expect them to be delivered, etc.)
* Outside of normal business hours, if there is both a credible threat and exposure, then Laboratories Administration personnel will arrange to meet Law Enforcement at the Laboratories Administration (1770 Ashland Avenue). Samples associated with a credible threat and/or exposure must be sent under chain-of-custody and therefore should not be entrusted to a courier. If there is not a specific credible threat and/or exposure, and testing is still requested, then the sample should be stored according to the local protocol developed by local law enforcement and the LHD and arrangements made to deliver the sample the next business day.
* The OLEPR 24/7 On-Call Contact Person will send a text message and/or e-mail to the BT Notify Group (RO / ARO or designee, Laboratories Administration Director, Deputy Director, appropriate Division Chiefs and designees, and the MDH MD On-Call), when a sample/specimen is going to be delivered to the Laboratories Administration.
* All samples should be screened by local HazMat teams for chemicals, radiation, and explosives before they are submitted to the MDH Laboratories Administration for testing. Although some jurisdictions may have access to a portable infra-red (IR) instrument, these will not reliably detect small amounts of bacteria and/or toxins. Therefore, even samples identified by IR should still be submitted to the Laboratories Administration for testing if there is a credible threat and/or credible exposure. If only small amounts of powder are present, the entire sample should be submitted to the MDH Laboratories Administration. Currently available field tests (so called "smart tickets") may be unreliable for the presence of bacteria and/or toxins and therefore, these tests are not encouraged or recommended by MDH or the Centers for Disease Control and Prevention.
* Samples should be triple bagged so that powder is completely contained. Miscellaneous Request forms must be completed for each sample and indicate each required test. If these are not completed prior to sending the sample, personnel delivering the sample will be required to complete the forms.
* Samples must be smaller than 18" by 24". For larger areas, wipe/powder samples must be collected by the HazMat team and the wipe or powder samples submitted for testing.
* The sample(s) should be taken to the Laboratories Administration as soon as HazMat has screened the sample(s) for chemicals, radiation, and explosives. When a sample is being sent to the Laboratory, both the local Health Department and the local BT Coordinator (or designee) will be notified (by the MDH MD On-Call).
* When the sample arrives at the Laboratories Administration, the receiving scientist is to notify the OLEPR 24/7 On-Call Contact Person (using the same contact numbers as above). The OLEPR 24/7 On-Call Contact Person will then send out a text message and/or e-mail to the BT Notify Group that the sample/specimen has been delivered (received) to the Laboratories Administration.
* Environmental samples are typically processed immediately using a multiple agent PCR screen (Bacillus anthracis, Francisella tularensis, Burkholderia spp., Yersinia pestis, and orthopox virus) and an immunoassay for the presence of ricin.
* If other biologic and chemical agents are suspected, requests must be communicated to the OLEPR 24/7 On-Call Contact Person (using the same contact numbers as above).
* When each unit has completed their testing of the sample (i.e. culture, TRF), they will phone or e-mail the OLEPR 24/7 On-Call Contact Person (using the same contact numbers as above). He/she will send out partial results by text message and/or e-mail to the BT Notify Group.
* When the OLEPR 24/7 On-Call Contact Person receives the Final Result, he/she will send out a text message and/or e-mail to the BT Notify Group.
* As each unit completes their testing of the sample, they will provide results to the referral agency, the LHD, and a hardcopy (or PDF by e-mail) to the OLEPR.
* The MDH MD On-Call will notify the LHD (if they have not been previously notified).

**THE MATRIX**

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|  | **Determined by LHD in conjunction with Law Enforcement** |
| **Determined by Law Enforcement** |  | **Credible Exposure** |
| **Yes** | **No** |
| **Credible Threat** | **Yes** | -High priority-Test immediately-Chain of custody important-Prophylaxis likely | -Medium priority-Test the next business day -Chain of custody important |
| **No** | -High priority -Test immediately -Need for chain of custody determined by law enforcement | -No testing unless exceptional circumstances-If tested, would be tested the next business day -Prophylaxis not indicated unless exceptional circumstances |

Both a credible exposure and a credible threat analysis MUST be performed in order to make decisions regarding the safety of the people exposed, the necessity for prophylaxis and the appropriateness and priority of laboratory testing.