SUJJUUE Training Manual Chemical Terrorism Packaging and The Shipping

August 2020

Contraction of the state of the

Phill Murphy, Governor Sheila Y. Oliver, Lt. Governor



ENGLISHTOW

Judith M. Persichilli, RN, BSN, MA Commissioner

Table of Contents

Important Addresses	ii
Preface	iii
Recognition of a Chemical Terrorism Event	
Get Dry Ice	2
Prepare Labels	3
Collect and Label Specimens	4
Specimen Conditioning	6
Pre-packaging Checklist	8
List of Materials	9
Packaging Frozen Urines	11
Packaging Refrigerated Blood	20
Driver Instruction and Sample Chain of Custody	34
Directions to Public Health Laboratory, West Trenton, NJ	35
References	37







Important Addresses

New Jersey Public Health, Environmental and Agricultural Laboratories (PHEAL)

3 Schwarzkopf Dr., Ewing, NJ 08628 Attention: Shawn O'Leary 609-508-7417

(Located on the grounds of the New Jersey State Police Headquarters Complex)

Centers for Disease Control and Prevention

Attn: Chariety Sapp 4770 Buford Hwy. Building 110 Loading dock Atlanta, GA 30341 (770)-488-0343 (770)-488-4600



Preface

The **Laboratory Response Network (LRN)** is an articulated network of local, state and federal laboratories prepared to work together in a rapid response during a bioterrorism or chemical terrorism event. Hospital laboratories are part of the LRN.

In a chemical terrorism event, when patients who may have been exposed to chemical agents, are expected to present in hospital emergency departments, the hospital laboratory should be prepared to respond by:

- 1. Rapidly collecting appropriate specimens
- 2. Rapidly conditioning specimens at appropriate temperatures
- 3. Packaging and shipping specimens as Biological substances, Category B, according to:
 - USDOT 49 CFR 173.199 packaging instruction
 - Manufacturer's instructions for qualified shipping systems
 - Centers for Disease Control and Prevention (CDC) guidance
- 4. Completing appropriate shipping manifests and chain of custody documents
- 5. If requested, transporting packages to the New Jersey Public Health Laboratory

This manual has been designed as a Just-In-Time Training Guide for hospital laboratories in carrying out these responsibilities. Packaging requirements from CDC, USDOT and the manufacturer of the qualified shipping system, Timesaver 48, have been integrated to simplify the user's process.







Be Prepared

Before an event occurs:

- 1. Procure, secure and regularly inventory materials listed in this manual on page 9-10.
- 2. Pre-condition the cold packs in the TimeSaver 48 shipping system according to the manufacturer's instructions.

Note: for each blood box shipped, you will need 10 refrigerated gel packs and 4 frozen gel packs.

- 3. Identify and maintain a dry ice vendor for shipment of urine.
- 4. Have NJDOH contact information and directions available in the laboratory.
- 5. Have a hospital chain of custody form prepared and available to accompany shipment.
- 6. Pre-print urine and blood shipping manifests.
- 7. Train and review training periodically with all responsible staff.



Important Phone Numbers

New Jersey Department of Health PHEL/ECLS/CT Program1-609-508-7417

New Jersey Poison Control (NJPIES).....1-800-222-1222

WARN DEP......1-877-927-6337

Additional Phone Numbers:

Local Health Department	
Local Fire Department	
Local Police Department	
Medical Communication Center	
Laboratory Administrator	
Emergency Department	
Emergency Prep Coordinator	
Other	









- Patients in the hospital's ED have signs and symptoms of exposure to chemical terrorism agents.
- Physicians consult with Poison Control (NJ Poison Information Education Services-NJPIES).
- Hospital consults with state authorities.
 - Determination is made to collect specimens for chemical terrorism rapid toxic screen.



- Hospital administration notifies the hospital laboratory that specimens are to be collected and prepared for shipment to New Jersey Public Health and Environmental Laboratories.
- Samples need to be collected <u>QUICKLY</u> to assure agents or metabolites do not break down. Blood needs to be collected ASAP and Urine 7-8 hours after exposure to produce the metabolites tested







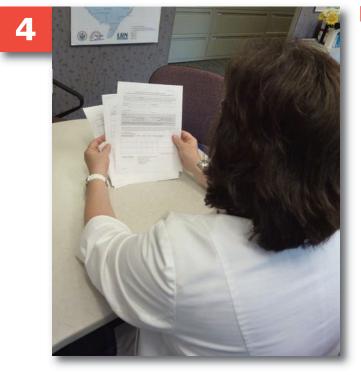
- Make arrangements for dry ice delivery (pelletized preferred)
- Dry Ice Vendor Directory <u>http://www.dryicedirectory.com/</u>

LABELS

Prepare specimen labels as you would for routine laboratory specimens to include two unique identifiers.

- You will need a set of 8 patient labels for each ADULT specimen:
 - 3-4 for the purple top tubes (depends on tube size used)
 - 1 for the grey or green top tube
 - 1 for the urine specimen
 - **1** for the urine manifest
 - **1** for the blood manifest
- You will need a set of
 2 patient labels for each
 CHILD specimen:
 - 1 for the urine specimen
 - 1 for the urine manifest





DOCUMENTATION

Blood Manifest: <u>https://emergency.cdc.gov/la</u> <u>bissues/pdf/chemspecimensh</u> <u>ipping-blood1.pdf</u>

Urine Manifest:

https://emergency.cdc.gov/la bissues/pdf/chemspecimensh ipping-urine1.pdf

Hospital Chain of Custody



- Laboratory should assist the ED in collecting, labeling specimens and completing the manifest and the chain of custody forms.
- In addition to unique patient identifiers (e.g. medical records number, specimen identification number) labels should convey the collectors initials, and date and time of collection so that law enforcement officials may trace the specimen to the collector should investigations lead to legal action and the collector has to testify that he/she collected the specimen.
- If you use bar-coded labels, place the labels on blood tubes and urine cups vertically, so that when these containers are upright, the bar code looks like a ladder.
- Do not cover expiration date/lot# when affixing label to blood tube









One ADULT SPECIMEN:

- **ONLY USE TUBES WITHOUT GEL.**
- Purple Top Tubes: Collect a minimum of 12 mL of blood by vacuum into four 3 mL purple top tubes OR three 4 mL purple top tubes. DO NOT OPEN THE TUBES. Using indelible ink, number the tubes in order of collection (1,2,3,4 or 1,2,3) Initial tubes, date and time. Mix tubes by inversion. Collect ASAP.
- Green or Grey Top Tube: Collect a 3 mL or larger green or grey top tube by vacuum. Allow tube to fill to stated capacity. DO NOT OPEN THE TUBE. Use indelible ink, initial tubes, date and time. Mix tubes by inversion.
- URINE: Collect 40-60 mL minimum of urine in clean screwcap urine container. Initial, date and time. Note method of collection if urine is not clean-catch. Collect 7-8 hours after exposure since testing metabolites.
- BLANKS: Two unopened purple top tubes from the same lot#, two unopened grey or green top tube from the same lot# and two unopened urine containers from the same lot#. One blank set is required for each lot utilized.







One CHILD SPECIMEN:

- Collect 25 mL minimum of urine in clean screwcap urine container. Initial, date and time. Note method of collection if urine is not clean-catch. Collect 7-8 hours after exposure since testing metabolites.
- Two unopened screwcap urine containers from the same lot #.
- NOTE: Maintain a list of names with corresponding specimen identification numbers at the collection site so that results can be reported to patients. It is recommended that you record additional data for use in the interpretation of results. Additional data may include; time of potential exposure, method of urine collection if other than cleancatch, indication if samples were collected post-mortem and antidotes administered prior to sample collection.

TRANSPORT SPECIMENS TO HOSPITAL LAB

- IMMEDIATELY transport all specimens from the site of collection to the hospital laboratory for proper temperature conditioning.
 - The sooner specimens reach conditioning temperature, the more likely all analytes will be detected.









CONDITION SPECIMENS IN THE LABORATORY

- **BLOOD:** DO NOT FREEZE. Refrigerate blood at 1- 10°C for a minimum of one hour prior to shipping.
- URINE: Freeze urine at -20°C for 2 hours or -70°C for 1 hour minimum prior to shipping.

SECURE SPECIMENS WHILE CONDITIONING:

Make sure refrigerators and freezers are locked during conditioning to maintain chain of custody.



TRANSFER BLOODS AND URINES TO GRIDDED BOXES

- Before loading the boxes, remove the grids and place absorbent material on the bottom. Replace the grids and place tubes in the box as shown in the pictures on the next page.
- Each blood box will hold tubes from 10 patients along with blanks. Each urine box will hold urines from four patients and two blanks. Three urine boxes are needed for every blood box.





CONDITION SPECIMENS

- Continue to cool the packaged blood at 1-10°C until ready to package and ship.
- Freeze urine at -20°C for two hours or -70°C for one hour.

PREPARE MANIFESTS

According to instructions on the forms.

NOTE: Manifests will accompany final packages. Urine manifests will accompany urines in dry ice box and blood manifests will accompany bloods in qualified refrigerated package.







12	PREPARE TO PACKAGE:	

While specimens are conditioning:

- Secure a driver to Ewing, NJ.
- Obtain dry ice for packaging urine.
- Call NJDOH Chemical Terrorism Laboratory to assure readiness to receive specimens: 609-508-7417 (Shawn O'Leary).
- Check correct type and amount of specimens collected.
- Check labels are affixed vertically to all containers for easy read of barcodes.
- Check manifests are filled out according to instruction.
- Time the specimen conditioning. After allotted time, visibly check to see if urines are frozen.
 - Assemble packaging materials see next page for list of materials needed to package 10 adult specimens.





Example of Materials for Packaging Chemical Terrorism Specimens Quantity Listed for Specimens from 10 Adults

Quantity	ltem	Manufacturer	Order #	Picture
1	TCP TimeSaver qualified Shipper or equivalent for 48 hour Refrigeration	TCP or equivalent	FEPS 00351	
1	Dry Ice Shipper (for Urine)	SafTPak or equivalent	INF 6000 15 1/2X 14 X 12 1/2	
2	Freezer Boxes for 6 urine samples each	Leigh Laboratories or equivalent	BC 368 8″X9″X3″	6 Gridded Box
1	Test Tube freezer box Holds 100 – (for blood samples)	Leigh Laboratories or equivalent	BC 5100	100 Gridded Box
3	Secondary Pressure Vessel system IATA 650 certified (1 for blood 2 for urine) TYVEK BAGS	SafTPak or equivalent	STP 740 12″X16″	STP 740 Land Scenity Couldwar Land Scenity Couldwar





Quantity	ltem	Manufacturer	Order #	Picture
3	Bitran Polyethylene Bags With Biohazard symbols (1 for blood, 2 for urine) PLASTIC BAGS	VWR 11217-548 or equivalent	16 x 16	And Andrew Control of
1	Class 9 Hazard Label (for frozen shipper)	Bureau of Dangerous Goods	DG-9 4″X4″	
1	UN 1845 Dry Ice label (for frozen shipper)	SafTPak or equivalent	STP 804 2″X3″	DRY ICE UN 1845 KG NET WT
2	Biological Substance, Category B labels	SafTPak or equivalent	STP 818	"Biological Substance, Category B"
2	UN 3373 Labels	Bureau of Dangerous Goods	DGUN3373 4″x 4″	UN3373
2	To: From: labels			TO: FROM:
1	Evidence Tape			ALL PROPERTY
1	Filamentous Tape			

PACKAGING FROZEN URINES - #13-29



Package urine samples first.

Blood should remain refrigerated as long as possible before packaging.

- Remove urine samples from freezer.
- Check visibly to make sure they are frozen solid.



- Place frozen urine specimens inside gridded box.
- Seal box all the way around with evidence tape, taking care not to break the tape.
 Evidence tape should be continuous and overlapping.
- Write your initials in permanent marker, half on and half off the evidence tape.







- Wrap the urine box in absorbent paper, and tape with evidence tape as before.
- Write initials in permanent marker, half on half off the evidence tape.
- Repeat these steps for the second gridded urine box.
- (Instructions are for 10 adult specimens)



 Place first absorbent-wrapped urine box into polyethelene bag, being sure to displace any air in bag.





- Place polyethelene bag inside Tyvek bag and seal.
- Repeat for second urine box.



- Seal Tyvek bag with evidence tape and initial half on tape and half on Tyvek bag.
- Repeat for second urine box.









Prepare Saf-T-Pak dry ice shipper.



 Place absorbent pad on bottom of dry ice shipper.





 Layer dry ice pellets over absorbant pad.



 Place the Tyvek-wrapped urine boxes on top of dry ice.







 Brace the Tyvek-wrapped boxes with absorbent pads to minimize shifting.



 Place pellets of additional dry ice on top of absorbent material.





 Place additional absorbent pad over dry ice.



- Place urine manifest inside a sealable/leak-proof plastic bag and place on top of absorbant pad.
- Do not place Chain of Custody form in this bag.









 Place Styrofoam lid over manifest.

NOTE: Do not tape styrofoam lid shut.



Use filamentous tape to seal outer packaging.

NOTE: Do not tape other edges of the outer packaging to allow for release of carbon dioxide gas.





Label with the following:

To and From Labels Biological Substance, Category B UN3373 Label Class 9 Miscellaneous Label Dry Ice UN1845 with weight in kg





PACKAGING REFRIGERATED BLOOD - #30-55

- To maintain temperature of blood, it will be necessary to work quickly. Recommended that packaging be done with a second person.
- All paperwork should be assembled and completed and packing materials ready before removing blood gridded box from refrigerator.



- Seal the gridded box all the way around with one continuous piece of evidence tape (<u>NOTE:</u> evidence tape breaks apart easily when applying to the box).
- Evidence tape should be continuous and overlapping.
- Initial half on the tape and half on the top on the box.





- Wrap entire gridded box with absorbent pad or absorbent sheet and tape to seal.
- Tape with one continuous piece of evidence tape.
- Evidence tape should be continuous and overlapping.
- Initial again as shown.



Place the box sealed with absorbent inside a Saf-T-Pak clear inner leak-proof polyethylene bag (or equivalent) and seal the bag shut.

<u>NOTE</u>: before sealing the polyethylene bag, remove the air buildup from inside the bag.







Place the sealed polyethylene bag containing the gridded box inside the white Tyvek outer envelope. (<u>NOTE</u>: The secondary Tyvek bag must meet the internal pressure requirement of 95kpa for air transport.)



- Remove excess air from inside the Tyvek bag and seal the opening of the envelope with a continuous piece of evidence tape.
- Write initials half on the evidence tape and half on the envelope.





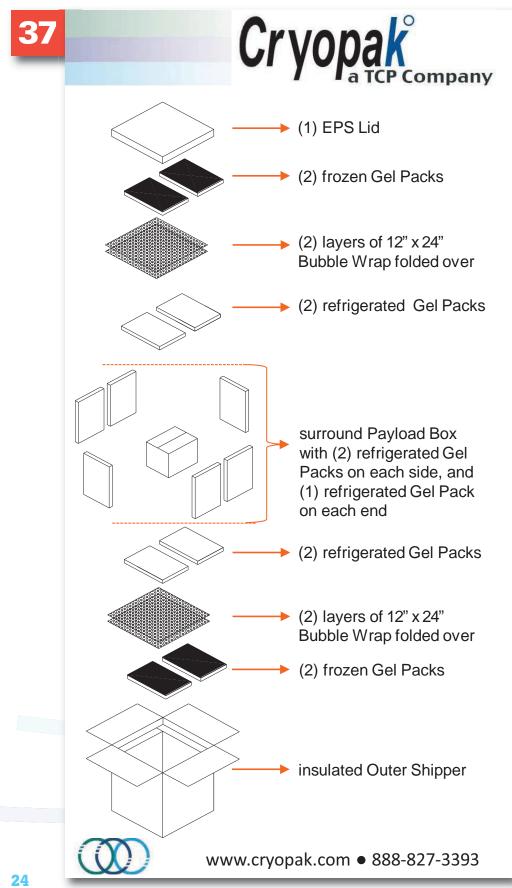
TimeSaver 48 qualified shipping system

NOTE: The system is guaranteed to maintain refrigerated items for 48 hours <u>ONLY IF</u> <u>PACKAGING INSTRUCTIONS ARE FOLLOWED</u>.

Disclaimer: The New Jersey Department of Health does not endorse the sole use of TimeSaver 48. This is provided only as an example. Other equivalent products are available for sale in the market.







TCP shipper with gel packs laid out.





- Place the sealed Tyvek bag inside the brown colored "Payload Box" component of the TimeSaver 48 prequalified shipping system.
- The "Payload Box" is a component of the TimeSaver 48 kit and is required by the manufacturer to maintain temperature for 48 hours. This is not a CDC requirement.



Seal the "payload box" shut with tape and set aside until ready to be placed inside the TimeSaver 48 prequalified shipper.









Empty TimeSaver 48 prequalified shipper ready to initiate "packout" procedure for shipping the blood specimens.



Place two (2) frozen gel packs horizontally on bottom panel (floor) of the insulated shipper.

<u>NOTE</u>: Freeze the gel packs so they freeze flat with equal thickness.





- Place two (2) layers of bubble wrap on top of the frozen gel packs. <u>NOTE:</u> This is not a CDC requirement.
- <u>NOTE:</u> Bubble wrap is included in the packaging.
- NOTE: This is not a CDC requirement.



 Place two (2) <u>refrigerated</u> gel packs horizontally on top of the bubble wrap.







Place the payload box containing the blood specimens inside the shipper on top of the refrigerated gel pack, centered in the cavity.



Place two (2) refrigerated gel packs vertically between the right side wall of the shipper box and the side wall of the payload box, if available. This is to help brace the package. Pads can be used as a replacement.





Place two (2) refrigerated gel packs vertically between the left side wall of the shipper box and the right side wall of the payload box.



Place one (1) refrigerated gel pack vertically between the end wall of the shipper box and the end wall of the playload box.









Place one (1) refrigerated gel pack vertically between the other end wall of the shipper box and the end wall of the payload box.



 Place two (2) refrigerated gel packs horizontally on top of the payload box.





- Place two (2) layers of bubble wrap on top of the refrigerated gel packs.
- **<u>NOTE:</u>** This is not a CDC requirement.



 Place two (2) frozen gel packs horizontally on top of the bubble wrap.







Place the completed blood shipping manifest in a sealable plastic bag and place on top of the frozen gel packs. <u>DO NOT</u> place Chain of Custody form inside the shipper.



- Place the lid on the shipper.
- **NOTE:** DO NOT tape the lid shut.





Use filamentous tape to seal outer packaging.

NOTE: Do not tape other edges of the outer packaging to allow for release of carbon dioxide gas.



 Outside box with completed labeling.







		logo/ address and other ot forget a phore number		
	С	hain of Custody		
Patient id numbers:	(can be a range if multip	le samples)		
Collected by:	(Printed Name)	(Signature)	(Date)	(Time)
		a second and the second	(Date)	(Time)
	here would be "I box cont			
Reason: example h	ere would be "handing off	to security"		
Received by:		Cart of the second s	(Deres)	(PP)
	(Printed Name)	(Signature)	(Date)	(Time)
Reason:	$1 \cap \land$	7		
Received by:	Reinted Name	(Signature)	(Date)	(Time)
1000	indiped inalia	(Signature)	(come)	(THE)
Reason:	21	Aliza		
Received by:	(Printed Name)	(Signature)	(Date)	(Time)
Reason:		111	\sim	
		VIN	JIT	
Received by:	(Printed Name)	(Signature)	(Date)	(Tique)
Additional Chain C	of Custody form attached?	Var No	$\langle \langle \rangle$	
- Additional Chain C	reasony is in anacieu.	103 100	7/	N
			~	< V
				\searrow

 Driver to sign hospital Chain of Custody (COC) form.

 Driver to sign NJDOH internal COC form and attain signature from NJDOH on hospital COC form.



Directions

New Jersey Public Health, Environmental and Agricultural Laboratories (PHEAL)

3 Schwarzkopf Dr., Ewing, NJ 08628

Attention: Shawn O'Leary 609-508-7417

(Located on the grounds of the New Jersey State Police Headquarters Complex)

All Employees, Couriers, Vendors and Visitors:

USE ALTERNATE ENTRANCE

6:00 AM – 6:00 PM Monday – Friday (non-holidays)

Directions to ALTERNATE ENTRANCE

From I-195 West (OPTION A):

Take I-195 West to I-295 North. Follow I-295 South to Exit 75, (Rte. 579 Trenton-Mercer Airport). At the exit ramp bear right toward West Trenton. At the second light, make a right on Upper Ferry Road. Follow Upper Ferry Road about ³/₄ mile to State Police Entrance, on your right. Note: Entrance is shortly after the large brick church on the left. Proceed to the guard station and show ID. At the STOP sign adjacent to the guard station, make a right and proceed up the hill to the second driveway on the left. The large glass building on your left is the PHEAL building.

From I-195 West (OPTION B):

Take I-195 West, continue straight at the interchange with I-295, and bear left as the road divides to continue on Route 29. After the Route 29 tunnel by the Riverfront Park baseball stadium, proceed 6 miles north along the Delaware River to the stop light for **Upper Ferry Road (Route 175)** and turn right, following the sign for the State Police Headquarters. Proceed past Villa Victoria Academy on your left and stay straight on Upper Ferry Road, not turning left on Route 175/River Rd. (Do not follow the Route. 175 sign) for 3/4 mile to the State Police Complex Entrance. Paulies Restaurant will be on your left just before the State Police Complex Entrance. Turn left and proceed to the guard station and show ID. At the STOP sign adjacent to the guard station, make a right and proceed up the hill to the second driveway on the left. The large glass building on your left is the PHEAL building.

From NJ Turnpike (north or southbound):

Take turnpike to exit 7A West. Follow signs for I-195 West. Follow *OPTION A* or *OPTION B* above.

From the South via Rte 206 North:

Take Route 206 North to I-195 West. Follow **OPTION A** or **OPTION B** above.

From the West and South via Pennsylvania Turnpike/ I-95 North:

Take PA Turnpike East to Exit 28 North. This will put you on Route 1 North. Follow Route 1 North to Interstate I- 295 East. Take interstate I-295 East and proceed across Scudder's Falls Bridge (toll). Take Exit 76 (Which exits before the bridge ends) and get onto Route 29 South. Make a left turn at the first traffic light (175 North). Continue less than one mile on Route 175 North past Villa Victoria Academy. Stay straight – onto Upper Ferry Road. (Route 175 North/River Road bends to the left – do not follow the 175 sign). Turn left at State Police Complex Entrance. Proceed to the guard station and show ID. At the STOP sign make a right and proceed up the hill, to the second driveway on the left. The large glass building on your left is the PHEAL building.







Directions

All Employees, Couriers, Vendors and Visitors:

USE MAIN ENTRANCE

6:00PM – 6:00AM (non-holidays), any time during holidays and weekends

COURIERS WITH ANY DELIVERY:

8:30 AM – 4:00 PM Monday – Friday (non-holidays) 1-609-530-8387

Follow the signs to the Loading Dock/Specimen Receiving area behind the PHEAL building.

All other times (prior arrangements must be made for emergency/after hours analysis)

Park in the front lot, go to the main entrance and check in with the security guard at the desk.

Directions to MAIN ENTRANCE

From I-195 West (OPTION A):

Take I-195 West to I-295 North. I -295 North becomes I-95 South (one continuous road). Follow I-95 South to Exit 1, (Route 29 Trenton/Lambertville). Bear left at the exit onto 29 South (Trenton). Stay in the left lane. Make a left turn at the first traffic light (175 North). Stay on Route 175 North past Villa Victoria Academy and the bend in the road. State Police Headquarters main entrance is about 1/2 mile further on your right. Continue to the guard station. Show ID and ask the guard to direct you to the laboratory building – large glass building on opposite side of campus.

From I-195 West (OPTION B):

Take I-195 west, continue straight at the interchange with I-295, and bear left as the road divides to continue on Route 29. After the Route 29 tunnel by the Riverfront Park baseball stadium, proceed 6 miles north along the Delaware River to the stop light for **Upper Ferry Road (Route 175)** and turn right, following the sign for the State Police Headquarters. Proceed past Villa Victoria Academy for 1/2 mile and turn left to stay on Route 175/River Road. State Police Headquarters Main Entrance is about 1/2 mile after the left turn on your right. Continue to the guard station. Show ID and ask the guard to direct you to the PHEAL laboratory building – large glass building on opposite side of campus.

From NJ Turnpike (north or southbound):

Take turnpike to exit 7A West. Follow signs for I-195 West. Follow *OPTION A* or *OPTION B* above.

From the South via 206 North:

Take 206 North to I-195 West. Follow **OPTION A** or **OPTION B** above.

From the West via Pennsylvania Turnpike/ I-95 North:

Take PA Turnpike East to Exit 28 North. This will put you on Route 1 North. Follow Route 1 North to Interstate I-95 North. Take interstate I-95 North and proceed across Scudder's Falls Bridge. Take Exit 1 (Which exits before the bridge ends. Stay in the left lane. Make a left turn at the first traffic light (175 North). Continue on Route 175 North past Villa Victoria Academy and the left bend. State Police Headquarters main entrance is about 1/2 mile further on your right. Continue to the guard station. Show ID and ask the guard to direct you to the laboratory building – large glass building on opposite side of campus.



References

CDC References:

- 1. Flowchart: Chemical Terrorism Event Specimen Collection <u>http://emergency.cdc.gov/labissues/pdf/Flowchart_CT_Event</u> <u>_Specimen_collection_modified_08/2016.pdf</u>
- 2. Chemical Agents: Shipping Instructions for Specimens Collected From People Who May Have Been Exposed to Chemical-Terrorism Agents - Updated May 2013 http://emergency.cdc.gov/labissues/specimens_shipping_ instructions.asp
- 3. Chemical Agents: Chemical Terrorism Blood Specimen Collection and Shipping Manifest http://emergency.cdc.gov/labissues/pdf/chemshippingformblood.pdf
- 4. Chemical Agents: Chemical Terrorism Urine Specimen Collection and Shipping Manifest <u>http://emergency.cdc.gov/labissues/pdf/chemshippingform-</u><u>urine.pdf</u>
- 5. CDC's Lab Response to Suspicious Substances <u>http://emergency.cdc.gov/labissues/substanceresponse.asp</u> Explains how federal, state, and local agencies respond to threatening letters and how labs play a role in detection and response.
- CDC Laboratory Response Network (LRN) website <u>http://emergency.cdc.gov/lrn/</u> Overview of the LRN, an integrated network of state & local public health, federal, military, and international labs that can

respond to both bioterrorism and chemical terrorism.

USDOT Reference:

Packaging Instructions for Infectious Substances, Category B 49 CFR 173.199

TCP Manufacturer's Instructions:

TimeSaver 48 Hour 2-8oC Pre-qualified shippers -Blood Specimens





