

DCH-1334, INSTRUCTIONS FOR SUBMISSION OF SPECIMENS FOR CHEMICAL EVENTS

Michigan Department of Health and Human Services (MDHHS)

www.michigan.gov/mdhhs

(Revised 9-24)

IMPORTANT: Specimens not properly labeled, test requisitions not completed, or specimen labels not matching requisitions cause delays in testing specimens or specimen rejection. Specimen labels must include two unique identifiers: date and time of collection and collector's initials.

NOTE: Suspected cases of chemical terrorism, chemical exposure, or chemical threats must be immediately reported to law enforcement, the Michigan Department of Health and Human Services (MDHHS) Bureau of Laboratories Director, and the MDHHS Bureau of Emergency Preparedness EMS and Systems of Care (BEPESoC). Refer to the listing below for telephone numbers.

MDHHS Bureau of Laboratories Director 517-335-8063

MDHHS Bureau of Emergency Preparedness EMS and Systems of Care 517-335-8150

MDHHS after-hours reporting telephone number 517-335-9030

Notify MDHHS Bureau of Laboratories before shipping specimens.

1. **Collect the specimens listed below. Containers, from the same lot numbers, should be used to collect specimens during a single event.**
 - a. **Urine:** From all patients, collect at least 40mL of voided urine only, in a clean screw-capped container with no preservative. Do not freeze more than 60mL of urine in a single cup. Write the amount of urine collected for each specimen on urine cup. If you must seal the urine cup to prevent leakage, use tape, **do not use Parafilm. FREEZE** the urine specimen as soon as possible to -70 °C or place on dry ice.
 - b. **Whole Blood EDTA:** Adult patients only, draw blood into three separate purple top EDTA tubes, 5 to 7mL each. Clearly mark tubes in the order drawn as tube #1, #2, and #3. Draw by vacuum-fill method only, **do not use syringe**. Verify that tubes were drawn by vacuum-fill method on DCH-1264, Chain of Custody form. Mix additives and blood in tubes by using full and gentle inversions. Refrigerate – **DO NOT FREEZE**.
 - c. **Whole blood, grey or green-top:** On adult patients only, **AFTER** all three EDTA tubes are collected, draw blood into one grey or green top (heparin, non-gel) tube, 5 to 7mL. Draw by vacuum-fill method; **do not use syringe**. Verify that tubes were drawn by vacuum-fill method on DCH-1264. Mix additives and blood in tubes by using full and gentle inversions. Refrigerate – **DO NOT FREEZE**.
 - d. **Blank cups and tubes:** Include two empty or blank urine cups, purple top tubes, and grey or green top tubes from each lot number used to collect patient specimens; the empty or blank cups and tubes must be secured alongside the collected samples.
2. Complete form DCH-1264, Chain of Custody (COC). This form is available on the MDHHS laboratory web page. DCH-1264 also serves as the MDHHS laboratory requisition. Up to eight patients can be entered on one form and entries must match the label on the specimen. You must use separate COC forms for urine and blood specimens. Keep copies of DCH-1264 for your records. Place completed DCH-1264 in a plastic bag and seal to protect forms from moisture during storage, shipment, or transport.

3. **Blood and urine specimens MUST be packaged in separate shipping containers! Blood must be shipped on COOLANT PACKS and Urine must be shipped on pelletized DRY ICE. Do NOT ship urine and blood in same container!**
 - a. **Blood:** When ready to ship, wrap properly labeled blood tubes with absorbent material and place in foam rack. Specimens should not touch each other. Wrap in additional cushioning to secure tubes inside rack. Place wrapped foam rack in a box and secure with evidence tape. Initial and date ½ on evidence tape and ½ on box. **Use a two-bag system to secure samples.** Place specimens into the inner plastic biohazard bag and seal. Place sealed biohazard bag into the outer white Tyvek envelope and seal. **Samples must be secured with evidence tape at one level with two continuous layers of tape.**
 - b. **Urine:** When ready to ship, place urine and absorbent material into the six-grid box or place them in small plastic biohazard bags with absorbents. Do not allow specimens to touch each other. If a six-grid box is used, secure box with evidence tape, initial and date ½ on evidence tape and ½ on box then wrap box with absorbents. If small biohazard bags are used, place specimens inside first part of the two-part secondary packaging and secure with evidence tape; or place boxed, secured, and wrapped specimens into the inner plastic biohazard bag and seal. Place sealed biohazard bag into the outer white Tyvek envelope and seal. **Samples must be secured with evidence tape at one level with two continuous layers of tape.**
4. Use rigid outer packaging, cardboard box with polystyrene foam liner for transport or shipping. Pack **refrigerated blood samples** on coolant packs that have been previously frozen. Pack **frozen urine samples** on pelletized dry ice. **Do not pack blood and urine samples in the same outer packaging.** Use cushioning to prevent contents from shifting. Place the DCH-1264 in a zippered plastic bag and place between the polystyrene foam lid and the rigid outer container. Seal top and bottom of rigid outer container with filament tape.
5. Apply necessary shipping labels to the rigid outer container. Specimens from a chemical event are shipped as “**Biological Substance Category B**” **UN3373**. In addition, a Class 9, Dangerous Goods label; a **UN1845** label, denoting the amount of dry ice used in kilograms; and the words, “Frozen diagnostic/medical specimens” should be applied to the outer shipping container for **Urine** samples. The “TO:” and “FROM:” labels should list the responsible party and a telephone number of the responsible party. **DO NOT USE** an answering service, pager, or other telephone number that does not give direct contact to the responsible party. Ship package overnight or as directed by MDHHS laboratory.

NOTE: The shipper is responsible for being sure that their package is compliant with current shipping regulations.

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By Authority of Act 368, P.A. 1978.