



POLICY ON TRANSPORTING BIOLOGICAL MATERIALS IN PRIVATE MOTOR VEHICLES AND MATERIALS OF TRADE EXCEPTION (MOT)

Date: May 5, 2017

Supersedes: None

I. PURPOSE

Biological materials occasionally need to be transported between campuses or to off-site locations by laboratory personnel for research. Certain biological materials that are transported by private motor vehicles, for the purpose of direct support of their business (*i.e.*, research) are exempt from most of the Department of Transportation (DOT) hazardous materials regulations, as long as they adhere to the requirements of the Materials of Trade (MOT) exception. New York Medical College (NYMC) has instituted this policy to establish procedures that will provide Materials of Trade exception awareness, identify biological materials that are covered under the exception, and implement actions that need to be followed when transporting MOT.

II. POLICY

Biological materials included in the MOT regulations must be handled, packaged, and transported, in personal vehicles, in accordance with all applicable federal, state, local MOT regulations as well as with all NYMC policies and operating procedures. Biological materials must not be transported on any form of public transportation (*e.g.*, buses, taxis or subway). Personnel using personal vehicles to transport MOTs should consult with his/her personal insurance policy regarding liability and coverage in the event of an accident. Incidents/accidents are not covered through NYMC. This policy does not apply to the relocation or movement of laboratories.

III. SCOPE

This policy applies to all NYMC faculty, staff, students, volunteers, space licensees, and contractors.

IV. DEFINITIONS

Division 6.2 Material (49 CFR 173.134 (a)): A material known or reasonably expected to contain a pathogen. A pathogen is a microorganism (including bacteria, viruses, rickettsia, parasites and fungi) or other agents, such as a proteinaceous infectious particle (prion), which can cause disease in humans or animals. A Division 6.2 Material must be assigned to one of the following categories:

- **Category A:** An infectious substances in a form capable of causing permanent disability or life threatening or fatal disease in otherwise healthy

humans or animals when exposure to it occurs (i.e., *Yersinia pestis* or *Ebola* virus)

- **Biological Substance Category B:** An infectious substance that is not in a form generally capable of causing permanent disability or life-threatening or fatal disease in otherwise healthy humans or animals when exposure to it occurs (i.e., Influenza virus or Salmonella).
- **Biological product:** a virus, therapeutic serum, toxin, antitoxin, vaccine, blood, blood component or derivative applicable to the prevention, treatment, or cure of a disease or condition of human beings or animals.
- **Patient specimen:** human or animal material collected directly from humans or animals and transported for research, diagnosis, investigational activities, or disease treatment or prevention.

Division 6.2 Material Exceptions (49 CFR 173.134 (b) (10)): A Division 6.2 material, other than a Category A infectious substance, contained in a patient sample being transported for research, diagnosis, investigational activities, or disease treatment or prevention, or a biological product, when such materials are transported by a private or contract carrier in a motor vehicle used exclusively to transport such materials. Medical or clinical equipment and laboratory products may be transported aboard the same vehicle provided they are properly packaged and secured against exposure or contamination.

Materials of Trade (MOT) (49 CFR 173.6): Hazardous materials that are carried on motor vehicles for at least one of the following purposes.

- To protect the health and safety of the motor vehicle operator or passengers, (e.g. insect repellent, fire extinguishers)
- To support the operation or maintenance of motor vehicles/auxiliary. (e.g., engine starting fluid, gasoline, spare battery)
- Materials that must be carried by a private motor carrier to directly support a principal business that is not transportation. (Academic and laboratory research, pest control, plumbing, painting).

MOT Biological Material (49CFR 173.6 (a)(4)): A Division 6.2 material, other than a Category A infectious substance, (i.e., biological substance Category B or patient specimen) contained in human or animal samples (including, but not limited to, secretions, excreta, blood and its components, tissue, and tissue fluids, and body parts) being transported for research, diagnosis, investigational activities, or disease treatment or prevention, or is a biological product or regulated medical waste.

Triple Packaging System: A system for transporting biological materials. The three components of a triple packaging system are:

- **Primary receptacle:** Holds the biological material and must be leak proof (liquids) or sift proof (solids). The closures are secured with parafilm or tape

to prevent opening during transport. The primary receptacle is packed into the secondary container in such a way that, under normal transport conditions, it will not break or leak into the secondary container. Multiple primary receptacles must be individually wrapped to prevent contact with other primary containers.

- **Secondary Container:** A durable, watertight, leak-proof container that encloses and protects the primary receptacle. Multiple primary receptacles may be present in a secondary container. The secondary container must contain enough absorbent material to absorb all liquid in the primary receptacle/s.
- **Outer Container:** A rigid and durable container with at least one side that is 10cm x 10 cm (4 in x 4 in) that holds the secondary container. The outer container must be marked and labeled and it must hold an itemized list of package contents.

V. PROCEDURES

A. Identification of biological materials included in the MOT regulations

Personnel must determine whether or not the material meets the definition of a MOT biological material.

- Human and animal specimens are covered in the MOT regulations and can be transported in a personal vehicle if all MOT requirements are met.
- Category A infectious substances are not covered in the MOT regulations. These agents are fully regulated by the United States Department of Transportation (DOT) and cannot be transported in a personal vehicle. Category A infectious substances must be transported by a contracted carrier.
- Cultures and stocks are not covered in the MOT regulations. The transport of cultures and stocks is also fully regulated by the United States Department of Transportation (DOT). Individuals that need to transport cultures and/or stocks in a personal vehicle must be DOT trained and certified. Cultures and/or stocks that are transported must be properly packaged according to DOT regulations for infectious substances.

B. Packaging and labeling MOTs for transport

At a minimum MOT biological material must be in a triple packaging system.

- Each material must be packaged in the manufacturer's original packaging or a packaging of equal or greater strength and integrity
- Packaging must be leak-proof
- Packaging must be marked with a common name of the material or proper shipping name
- OSHA requires a biohazard label on the outer package if the package contains human material

- Primary receptacles cannot contain more than 0.5kg or 0.5L and outer containers cannot contain more than 4kg or 4L.

C. Transport

- At the time of transport, the vehicle must be used exclusively to transport such materials and not utilized for other purposes.
- If dry ice is used for transportation, the packaging must be constructed to permit the release of carbon dioxide gas and the package must be labeled "Dry Ice". Packages with dry ice should be transported in the trunk, if possible, to protect the transporter from buildup of carbon dioxide.
- The transport vehicle should have a spill kit available. Minimally the spill kit should include, appropriate gloves, eye protection, absorbent material, and bags for spill debris.

D. Hazard Communication

- All passengers in the motor vehicle must be informed of the presence of the materials being transported and MOT transportation requirements and limitations.

VI. EFFECTIVE DATE

This policy is effective immediately.

VII. POLICY RESPONSIBILITIES

- A. New York Medical College faculty, contractors, students, space licensees and/or volunteers that transport MOT
1. Have a general awareness of the MOT regulations;
 2. Package, label, and transport shipments materials appropriately
- B. Environmental Health & Safety
1. Identifies personnel that are transporting biological materials of trade;
 2. Ensures that the MOT requirements are communicated to appropriate personnel;
 3. Assists personnel with MOT regulation compliance

VIII. POLICY MANAGEMENT

Responsible Executive: Vice President of Operations

Responsible Officer: Director, Energy, Environment, Health & Safety

Responsible Department: Energy, Environment, Health & Safety

Approved by the Chancellor's Office, Office of the Vice President of Operations and the Department of Energy, Environment, Health and Safety