Purpose
The purpose of this SOP is to provide instructions for personnel who need to ship a package with dry ice.

Dry Ice Shipping Regulations
Dry ice (carbon dioxide solid, UN 1845) is considered a dangerous good/hazardous material for air transport and requires special handling. Shippers are required to have received function-specific dangerous goods training, as outlined in 49CFR (Code of Federal Regulations) 172.700. Staff members of Spokane EH&S have completed this training.

Shipping Request Form
1. One day prior to the planned shipment, complete and submit the Shipping Request Form found at: https://spokane.wsu.edu/facilities/mailing-services/shipping-request-form/
2. Upon receiving acknowledgement of the receipt by email, a copy must be forwarded to the EH&S group (olga.shiva@wsu.edu or merle.heineke@wsu.edu).
3. EH&S will verify that dry ice and an appropriately sized box is available. FedEx prefers that new boxes be used for dry ice shipments. If boxes are reused, all previous labels should be removed, and the integrity of the cardboard box must not be compromised. The insulated foam container is to have a wall thickness of 1 to 1.5 inches, at a minimum.

Preparation of the Shipment
1. Freeze the products to be shipped before packaging.
2. If the shipment contains liquid or perishable products that can melt or thaw, bag the products or line the insulated container using a watertight plastic bag with a minimum thickness of 2 ml.
3. EH&S will place a sufficient amount of dry ice on the bottom of the container, around the products, and on top.
4. EH&S will fill void spaces with dunnage material, such as loose fill peanuts or kraft paper.
5. If a liner bag is used, do not completely seal it as the carbon dioxide created by the dry ice must be allowed to vent. Dry ice must never be placed in an airtight container.
6. EH&S will close and securely tape the box with pressure-sensitive plastic tape.
7. EH&S will weigh the sealed box and calculate and report the weight of the dry ice (total weight – weight of empty box – weight of the sample = weight of the dry ice).
Required Paperwork (Prepared by EH&S)

When shipping with dry ice, the correct identification, classification, markings, and labeling must be provided on the outer carton to comply with current requirements in the International Air Transport Association (IATA) dangerous goods regulations.

The following permanent markings are required on the outer packaging of all IATA dry ice shipments:

1. “Dry Ice” or Carbon Dioxide Solid"
2. “UN 1845"
3. Net weight of dry ice in kilograms
4. Name and address of the shipper
5. Name and address of the recipient
6. Additional signage may be required based on contents.

Considerations:

1. No printing is allowed within the diamond shape.
2. The label must not fold over the edge of the box.

Cost of Dry Ice Shipment (effective 7/1/2020; subject to change)

The dry ice shipment cost includes the cost of the dry ice, tech time, and the dry ice shipping box.

1. Dry Ice: $4.00/lb.
2. Tech Time: $45/hr.
3. Box:
   a. Small - $7.16/box
   b. Medium - $9.42/box
   c. Large - $14.51/box
   d. Extra Large - $25.59/box