Opening Packages under Containment

Mindfulness Minute: Incorporate safety into your workflow by using controls when opening packages to protect yourself from spills and exposures due to mispackaging or damage during shipment.

Strict regulations are in place to ensure that hazardous materials arrive at their destination safely; however, mistakes during packaging, handling, transport, and loading can occur which may lead to spills/loss of containment. Opening packages in a fume hood or biosafety cabinet, as appropriate, can help prevent exposure to hazardous materials in the event of a spill or loss of containment. Additionally, opening packages of permitted materials under containment may be a requirement of the regulatory permit for the receipt of the materials. Consult your permit or contact the issuing regulatory agency to determine whether this is a requirement.

Follow this list of dos and don'ts for safely opening packages containing hazardous materials:

Do open packages containing biological materials, especially infectious agents, in a biosafety cabinet, and open packages containing chemicals in a chemical fume hood.

Do write or consult an SOP and spill response plan for the anticipated materials before they arrive. Ensure you have appropriate spill clean-up materials available.

Do visually inspect the contents of packages to identify cracks, loss of liquid or powder, or other non-standard conditions.

Do disinfect the surfaces of secondary containment before opening packages containing biohazardous materials even if it is not visibly contaminated.

Do contact EHS to report any spills, near misses, or abnormal packages. Call if you need urgent assistance with spilled materials. Call 911 in emergency situations.

Do dispose of contaminated shipping and spill clean-up materials as hazardous waste.

Do contact the manufacturer or shipper if a package arrives without necessary information including identification labels and safety data sheets (SDS).

Do wear appropriate PPE for the anticipated materials when opening packages.

Do report any undeclared or incorrectly declared hazardous material packages to EHS and the Department of Transportation (DOT) by filling out Incident Report Form F5800.1.

Don't open packages whose contents are for laboratory use in office areas.

Don't accept damaged or leaking packages if possible. If this is not Hazardous material placards can help you possible, perform appropriate spill clean up and dispose of all materials as hazardous waste.



Real life example: Picric acid was packaged incorrectly before being shipped to a lab at UT, resulting in potentially hazardous drying of the picric acid and a spill. Note that spill cleanup materials collected for submission to hazardous waste.



identify the hazards within shipments you receive. Mislabeled or unlabeled hazardous materials can be a serious safety issue and should be reported to EHS and the DOT.

References:

https://www.lion.com/lion-news/september-2025/i-received-noncompliant-hazmat-what-now https://www.lion.com/lion-news/january-2024/how-undeclared-hazmat-gets-discovered-in-transit