



Exhibits and Design

Object Handling Procedure

Proper object handling and careful movement of objects is an integral part of preventive conservation. When you move objects you increase the risk of damage and loss because you are both handling them and changing their location. **Moving puts an object at its greatest risk.**

Before you move objects within the museum for dusting, cleaning, or any other purpose, know and follow the procedures in order to help reduce the risk of damage to you and the object. Plan before handling or moving any museum objects. Think through your plan so that you lift and move objects properly. With advanced planning, you can keep movement of objects to a minimum. **The less museum objects are handled, the longer they will survive.**

A. Basic Handling Practices

When you handle objects, act safely, conservatively and carefully for you and the object. Follow these basic standards to prevent damage to objects:

1. Handle objects only when necessary.
 - Treat every museum object as if it was irreplaceable and the most valuable piece in the collection.
 - Never hurry.
 - Take no risks.
2. Prepare to move objects safely.
 - Keep hands clean, even when wearing gloves.
 - Wear appropriate gloves to protect objects from contaminants such as dirt, salts, acids, and oils on your hands. Beware of fabric gloves catching on ruff surfaces.
 - Avoid wearing anything that might damage objects by scratching or snagging the surface (for example, rings and other jewelry, watches, belt buckles, nametags, service badges).
3. Create a good environment and use appropriate tools.
 - Allow yourself plenty of space in which to work.
 - Never smoke, eat or drink while handling objects.
 - Use pencils, **NOT** pens, when working near objects.
 - Keep paint and water in a separate container away from object.
4. Prepare objects to move.
 - Know the condition of an object before handling it.
 - Don't lift by protruding handles or rims, which are often structurally weak.
 - Give additional support such as a tray or mount, to fragile objects before lifting.
 - Leave objects oriented as you find them.
5. Lifting and Moving
 - Lift items properly.
 - Move only one object at a time. Note: Small items may be moved together in a tray **IF** they are separated and supported by padding.
 - Never layer or stack objects when moving them.

6. Storing
 - Store objects so they can be easily moved without disturbing other objects.
 - Tie on acid-free, cotton string tags or number trays, boxes, and bags so numbers can be easily seen without handling the object.
 - Save all information associated with an object (for example, tags or labels).

B. Safe Handling Processes and Standards.

1. Consider safety first.
 - Inspect equipment to ensure that the object and the handler will be safe
 - Do you have the proper personal protective equipment?
 - Make sure there is room to handle and turn the object.
2. Planning to move. Planning helps keep handling to a minimum and reminds that each museum object is special.
 - Plan each step in the process before handling or moving a museum object for any type of work, even routine or daily housekeeping tasks.
 - Where will you stand before picking up the object?
 - Is there an open space to receive it?
3. Consider and evaluate the object.
 - What are the object's structural characteristics and condition? Is it strong enough to withstand the move? Is there documentation that gives recommendations on moving hazards or safe handling/ moving techniques?
 - Is there evidence of previous repairs? Review catalog records, condition reports, and photographs and examine the object to identify previous damage that may make the object especially fragile.
 - Check for loose parts or fragile surfaces. Careful examination will usually reveal if an object is not stable.
 - Don't move the object if you don't have to. Constantly handling and moving objects can cause them harm.
4. Preparing the object.
 - Place objects inside containers (trays or boxes) for carrying.
 - Don't allow objects to stick out beyond the sides of the containers.
 - Pad objects using museum materials (for example, polyethylene foam or acid-free tissue).
 - Secure objects in separate compartments in a box or tray to prevent them from being damaged.
5. Picking up the object.
 - How many people are required? Do you need help to move the object?
 - Use a support board or tray whenever possible
 - Stabilize any loose parts that cannot be removed.
 - Handle only one object at a time, and use both hands.
 - When an object has more than one part, for example, a teapot and lid, handle each part separately.
6. Moving and mechanics.
 - Identify the strongest part of the object and hold it at this point.
 - Lift most objects from the base and/or close to the center of gravity.
 - Don't lift objects by protruding parts such as handles or rims.
 - Don't try to push or drag objects across surfaces.
 - Move slowly and concentrate on what you are doing.

C. Gloves

Gloves protect objects from contaminants such as dirt, salts, acids, and oils on your hands. Even clean hands can transfer these damaging substances.

1. Be clean.
 - Even when wearing gloves, wash your hands frequently.
 - Be careful not to rub your face and hair and then handle objects.
2. Wear clean gloves.
3. Wear the appropriate type of glove for the object type and material.
 - Cotton gloves are okay for most objects
 - Nitrite gloves must be worn when handling these types of objects:
 - Slick objects like ceramics or glass
 - Objects with oily or tacky surfaces that can attract cotton fibers
 - Fragile or damaged organic materials that may catch on cotton fibers
 - Some natural history specimens, especially if they have been treated with an insecticide in the past.

D. Moving Equipment and Materials

Use proper equipment to handle and move so that the move is safe for both objects and people.

1. Use the correct type of equipment.
 - Useful equipment includes trays or baskets to support objects and flatbeds, carts, dollies, and pallet lifters to move objects.
2. Inspect the equipment.
 - Make sure that is safe for both the object and the person handling the object before you begin.
3. Pad carts and other surfaces.
 - Use polyethylene foam or another stable material to protect the objects.
4. Use doorstops to prop doors open before you pass through.
5. Use protective equipment when appropriate.
6. Postpone moving the objects.
 - Wait until you have proper equipment supplies, space, and trained helpers

E. Planning and Preparing the Move

Advanced planning provides for a safe move.

1. Plan the move.
 - Identify the route to take
 - What equipment and personnel to use
 - Schedule time you'll need to complete the move. Don't move objects during peak public visitation periods or facility open hours, if possible.
2. Consider the areas and surfaces.
 - Be aware of all surfaces that the object may contact (for example, doors floors, and walls).
 - Study the spaces through which the object may pass (for example, doorways, stairwells, display areas).

3. Prepare the areas.
 - Make a clear pathway to the new location. Avoid tight areas.
 - Ensure the new location is ready to safely house the object before moving the object.
4. Out of doors and weather conditions.
 - If transporting the object outdoors move it when weather conditions are good, with no rain, snow, or extreme heat. If this is not possible, take appropriate precautions such as waterproof coverings and packing to provide environmental buffering.
 - Be aware of weather conditions at the final destination to determine the type of protective container needed.

F. Damage

If damage occurs, notify the appropriate supervisor and staff members.

1. Report the damage.
2. Record damage in the catalog record.
3. Take photographs of the damage.
4. Save all pieces and carefully pack them so that no further damage occurs before a conservator can make repairs.
5. Wrap and bag small pieces in self-sealing polyethylene bags labeled with the appropriate object identification information.

G. Personal health and safety

Follow health and safety precautions when handling museum objects.

1. Use proper personal support equipment, such as a lumbar support belt. Don't lift more than you can safely carry.
2. Practice safe lifting techniques.
 - Be sure you have firm footing and keep your legs apart. Get close to the object and keep it near your body.
 - Use your leg and stomach muscles, not back muscles, when lifting from a stooped position. Bend at the knees.
 - Keep your back straight. Avoid twisting; pivot using your feet.
3. Be careful how you handle potentially dangerous objects (for example, firearms, ammunition, medicines, and furs).
4. Don't touch or inhale fumes or particles from objects treated with pesticides.