

Photographs include traditional black-and-white and colour prints and negatives, colour transparencies and historic photographic images captured with a range of processes on glass, paper, plastic, leather and metal. Photographs also include images that are captured and printed digitally.

Photographs are prone to various types of deterioration that can affect both the image and support layers. The main causes of deterioration in photographic materials are poor processing, atmospheric pollutants, physical fragility and chemical instability. While we cannot stop inherent deterioration, good storage practices, suitable packaging and stable environments can at least slow its progression.

## Handling

- Generally, photographic materials should be held carefully by the edges. Handle items with clean dry hands or with nitrile or latex gloves.

## Labelling

- Photograph details can be recorded on a separate piece of archival quality paper and retained with the collection or within a photo album.
- Avoid writing on the backs of original photographs, especially with inks or ballpoint pens. If necessary, a soft lead pencil of 'HB' or 'B' grade may be used with care on the back.
- Label negatives with permanent pigment ink on the outside edge of the negative. Slides may be labeled on the edge of the white border mount also with a pigment ink pen.

## Display

- Framing objects provides protection against dust, dirt, pollution and environmental changes. Archival quality framing materials are recommended to ensure long-term preservation of photographs. Use ultraviolet-filtering acrylic as glazing to reduce the impact of light damage. See our fact sheet on the '*Benefits of Mounting and Framing Artworks*' for more details.
- Ensure the surface of the photograph never touches the glazing of a frame. Heat and humidity can cause the photograph to become irreversibly stuck to the glazing.
- Display photographs in cool, dry environments, with stable conditions of humidity and temperature. Avoid contact with bathroom, kitchen, laundry and external walls as humidity in these areas fluctuates greatly and can cause physical distortions. High humidity causes mould

growth, so keep display areas well ventilated.

Keep photographs away from heaters, fireplaces and other sources of heat.

- Avoid strong light sources and direct sunlight as these will accelerate deterioration and fading. Use low ultraviolet-emitting light tubes. Certain types of colour photographs and some digital prints are more vulnerable and prone to fading.
- Consider displaying copies rather than originals; this applies especially to some historic photographic processes that are extremely light sensitive. Please see our fact sheet on '*Creating Copies*' for more information.
- Dry mounting (use of a pressure sensitive or heat release adhesive on a flat backing sheet) is not a preservation mounting technique and should be avoided for your valuable photographs.
- Do not laminate photographic prints as this can permanently damage the emulsion layer

## Storage

- Photographs should be stored in cool, dark and dry conditions with stable humidity and temperature. Locations where environmental conditions fluctuate such as sheds, garages, roof spaces and basements are unsuitable.
- There are a variety of suitable storage enclosures that can be used for long-term storage of photographs. Use of a multi-layered system i.e. sleeve, box, cabinet will provide increased protection.
- When choosing enclosures look for materials or products that have passed the Photographic Activity Test. This certifies that the material is safe for use with photographs. Prints and negatives are best packaged individually but if packaging in groups is unavoidable, the photos

- should be interleaved with acid-free paper or board.
- Photographs can be stored in plastic sleeves in archival ring binders. Polyester is the most stable plastic for photographic storage. Polypropylene (PP) is a low cost and readily available alternative. Avoid the use of plastic that has a hazy film on the surface as this indicates that the plastic film is coated or heavily plasticized. Never use polyvinyl chloride (PVC) sleeves and folders.
  - Archival quality acid free paper envelopes are suitable for storing prints and deteriorated negatives. It is generally recommended that the paper be unbuffered as some photographic processes react adversely to buffered papers. Seamless envelopes are preferred.
  - Never use metal pins, staples, paper clips, rubber bands or adhesive tape to secure photographic materials. Do not try to remove tapes and labels adhered to photographic materials without conservation advice. Only remove rubber bands and metal fasteners when it can be done without damage.
  - Negatives should be stored in archival quality sleeves. Ideally, both nitrate and acetate negatives should be kept isolated from other collection material because of the damaging vapours they produce. Nitrate negatives are also highly flammable and further consultation should be sought regarding the safe storage of these materials.
  - Colour photographic slides can be stored in their original plastic boxes. Otherwise, they can be stored in archival quality slide storage pages that have passed the Photographic Activity Test.
  - Store cased photographs (daguerreotypes, ambrotypes, etc.) in their cases. Wrap the case in archival material such as acid-free paper to create a dust cover.
  - Stacking digital prints may cause the ink to offset onto adjacent material. Ensure your prints have dried fully before storing to avoid smudging and offsetting.
  - When choosing storage albums or boxes, be sure to use inert, pH neutral paper materials and plastics (e.g. polyethylene, polypropylene). Use archival quality photo-corners to adhere photographs to pages in non-adhesive albums.
  - Do not use 'magnetic' photograph albums where the photographs are kept in place with a slightly tacky adhesive. In time, this adhesive may turn brown and cause staining and the photographs can be difficult to remove safely. Avoid any products that contain PVC plastics.
  - Enamelled steel filing cabinets are suitable for storage of prints and negatives. Wooden cabinets and enclosures must be coated with paint, lacquer or wax to prevent the discharge of vapours that are harmful to the silver content of prints and negatives.

## More information

For more information on care of photographic materials, please see the following resources:

CCI Notes: <http://canada.pch.gc.ca/eng/1439925167385>

reCollections: <https://aiccm.org.au/conservation/collection-care>