

Identifying Hazards within Your Collections

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Webinar Goals

- Film and negatives
- Firearms
- Mounts/specimen
- Rocks and fossils
- Ethnography/anthropology
- Medical/dental/veterinary Equipment
- Radiation
- Art
- Metals
- Food

<http://www.cr.nps.gov/museum/publications/conservrogram/02-10.pdf>

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Plastic Film Supports



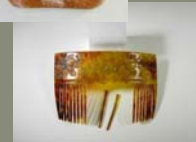
- Cellulosic plastics
 - Nitrate, 1889 – 1951
 - Acetate, 1920s – present
- Polyester, 1955 – present

<http://www.cr.nps.gov/museum/publications/conservrogram/02-22.pdf>
<http://www.nedcc.org/resources/leaflets/5Photographs/01ShortGuide.php>

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Nitrocellulose Cousins French Ivory/Celluloid/Collodion

- Jewelry and personal accessories
- Musical instruments
- Household items



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Nitrate Cousins

- White efflorescence
- Cracking & Shrinkage



ArtCare Resources, Newport, RI

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Fire Grenades



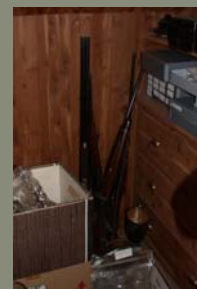
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Black Powder



Firearms

- Look relatively harmless
- Do not have to be large in size



What shape and size?



- Soot residue
- Cannon balls
- Small squib/shells



Anything that might explode

- Mining equipment
- Whaling equipment
- Parachutes
- Tear gas canisters
- Search and rescue equipment
- Road flares



1827 California Whaling Rocket Harpoon

Anything that might explode

- Photographic flash powder
- Paint can
- Golf balls
- Chemistry sets



Messy hazards/Not so obvious items

- Whale oil
- Tinned food
- Preserved foods



Corrosive Fluids

- Batteries
- Hydraulic fluid
- Break fluids



<http://www.cr.nps.gov/museum/publications/conservceogram/10-03.pdf>

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Medical/Vet/Dental Kits Pharmaceutical Collections



- Hidden needles / contaminated with pathogens
- Ether
- Nitroglycerine
- Controlled substances and poisons

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Pathogens



<http://www.cr.nps.gov/museum/publications/conservceogram/02-08.pdf>

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Fluid-Preserved Wet Specimens

- Formaldehyde and alcohol preserving fluids
 - Alcohol is highly combustible
 - Ventilation
 - Raise electrical outlets
 - Flammable cabinets
 - Emergency plan



<http://www.cr.nps.gov/museum/publications/conservceogram/alcsafety2-18.pdf>

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Ethnobotanical Hazards



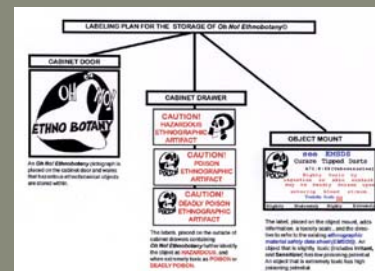
Herbal remedies



Coral Bead Vine
Abrus precatorius

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3-Tier Labeling System



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Hazardous Geology

Mercury



Asbestos



<http://www.nps.gov/museum/publications/conservogram/11-11.pdf>

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Mercury

- Barometers/thermometers
- Ship gimbals
- Lighthouse lens assemblies
- Milliners' supplies
- Historic mirrors
- Light switches



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Asbestos



Theater curtains



<http://www.cr.nps.gov/museum/publications/conservogram/02-11.pdf>

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More Hazardous Metals

Lead

- Pottery, stained glass windows, window glazing, roof flashing, utensils, art supplies, food cans, old bullets

Zinc

- Metal working supplies and debris
- Old portable forges
- Roof flashing



- Cadmium
- Arsenic

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Natural History

- Pesticides
- Heavy metal preserving solutions/powders



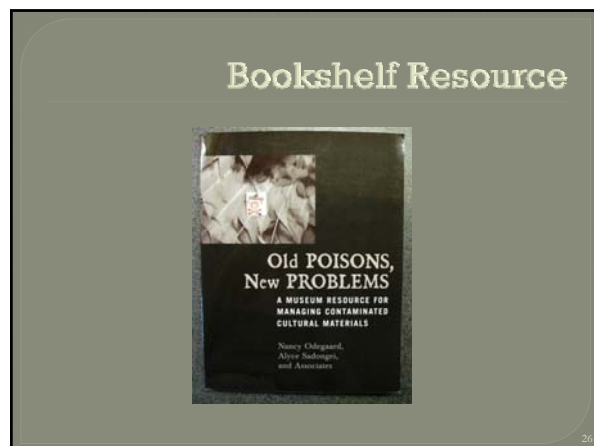
<http://www.cr.nps.gov/museum/publications/conservogram/02-19.pdf>

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Furs and Skins



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Howard H. Baker Center for
Public Policy

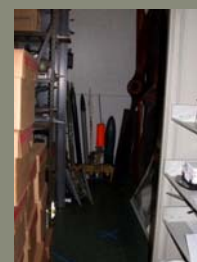


Uranium



Radiation Label

- Radium-painted surfaces
- Medical, veterinary, dental equipment
- Geiger counters
- Civil defense equipment
- Atomic bomb/ nuclear equipment
- Rocks and fossils



Control Exposure

- Inventory and assess condition
- Clear labeling and handling procedures
- Practice good housekeeping
- Practice good personal hygiene
- Wear appropriate Personal Protective Equipment (PPE)
- Maintain Material Safety Data Sheets (MSDS)
- Dispose of hazardous materials properly
- Get expert advice
- Professional development/training

<http://www.cr.nps.gov/museum/publications/conservogram/02-01.pdf>

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