

# Disaster Relief

## *Cleaning Household Utensils and Metals*

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### **Cleaning and Sterilizing**

#### **Dishes and Cooking Utensils**

Before using any dishes, pots, pans, or cooking utensils that were in contact with floodwater, wash and sterilize them.

1. Any piece of equipment that can be taken apart should be cleaned in pieces. Remove plastic and wooden handles from frying pans and saucepans. Clean parts separately.
2. Wash dishes, pots, pans, and utensils in hot, sudsy water. Use a brush, if necessary, to remove dirt.
3. After brushing in sudsy water, rinse in clear water. Place dishes in a wire basket or other container and dip them in a sanitizing solution. Use a solution recommended by local health authorities, or use 1 cup liquid chlorine bleach to 1 gallon of water plus non-phosphate detergent for cleaning and disinfecting. Never mix bleach and ammonia. Throw away any unused bleach solution. Bleach may damage wood and some metallic surfaces and is less effective on porous surfaces, such as unpainted wood. Clean these materials with a nonphosphate detergent (One example is Savogran® TSP-PF). Do not use detergents with trisodium phosphate (TSP).
4. Air-dry dishes. Do not dry them with a dishcloth. If cupboards and food preparation surfaces were in contact with floodwater, clean and rinse them with a chlorine bleach solution before storing dishes and utensils.

### **Cleaning Household Metals**

Rust causes the most damage to flooded household metals, especially iron. Use the following treatments to control rusting.

#### ***Iron Pots, Pans, and Utensils***

1. Wash with soap and water, using a stiff brush and scouring powder.
2. If rust remains, wipe with an oil-saturated cloth, or use a commercial rust remover.
3. Remove rust from kitchen utensils by scouring with steel wool.
4. Wash in hot soapsuds, rinse, and dry thoroughly.
5. Season iron pans and utensils with a generous amount of unsalted cooking oil. Heat in a 250 °F oven for two or three hours. This will let oil soak into pores of metal. As it heats, apply more oil as needed. When seasoning is completed, wipe off the excess oil.

#### ***Hardware***

1. Coat iron hardware with petroleum jelly or machine oil to prevent further rusting.
2. Use stove polish on stove or similar iron-work.

#### ***Locks and Hinges***

Locks and hinges, especially iron ones, should be taken apart, wiped with kerosene, and oiled. Follow the same procedure as for iron hardware. If you can't remove locks or hinges, squirt a little machine oil into the bolt opening or keyhole. Work the knobs to distribute the oil. This helps prevent rusting of the springs and metal casing. (Do not use too much oil: it may drip on the woodwork, making painting difficult.)

#### ***Stainless Steel, Nickel-Copper Alloy, Nickel or Chrome-Plated Metals***

1. Wash thoroughly, and polish with a fine-powdered cleanser.
2. If furniture plating or hardware is broken so that base metal is exposed and rusted, wipe with kerosene, and then wash and dry the surface. Wax to prevent further rusting.

#### ***Aluminum Pans and Utensils***

1. Wash thoroughly with hot sudsy water. Scour any unpolished surfaces, such as the insides of pans, with soapy steel wool pads. Rub in one direction only.
2. Polish plated aluminum surfaces with a fine cleansing powder or silver polish. Do not scour.
3. Sterilize in a chlorine bleach solution.

4. To remove dark stains from aluminum pans caused by alkaline foods, fill pan with water. Add 1 tablespoon vinegar or 2 teaspoons cream of tartar for each quart of water. Boil for 10 to 15 minutes, scour with steel wool pad with soap, rinse, and dry.

### **Copper and Brass**

1. Polish with a special polish or rub with cloth soaked with vinegar or with a piece of salted lemon.
2. Always wash copper thoroughly with soapsuds after using acids or commercial polishes or they will tarnish again rapidly.
3. Wash lacquered ornamental copper in warm sudsy water. Rinse with warm water, and wipe dry. Do not polish. Do not soak.

### **Pewter**

1. Wash thoroughly with hot sudsy water, rinse and dry. Use a soft toothbrush to get into crevices.
2. Rub on silver polish (paste or liquid, not the dip type) with a soft cloth. Use a soft toothbrush to get into crevices.
3. Rinse in hot soapsuds and dry.
4. Check for small holes, cracked joints, and dents. If the pewter needs mending and is a prized piece, let a professional fix it.
5. You can mend small holes by cleaning the metal inside the pewter object with steel wool, then filling with pewter epoxy mender. Follow instructions on the label carefully.
6. Replace felt or other protection materials that have separated from household decorative accessories such as bookends, ashtrays, and candleholders. You can buy felt or protective materials in fabric stores. Cut it to match the damaged ones, and glue the new ones in place with rubber cement.

## ***Drying Books and Family Papers***

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1. Dry books and papers slowly.
2. If books and papers are damp, sprinkle cornstarch or talcum powder between pages to absorb moisture. Leave powder on for several hours, and then brush off.
3. Place books with water damage on end with pages separated.
4. When pages are partially dry, pile and press books to keep pages from crumpling.
5. Alternate drying and pressing until books are thoroughly dry. This helps prevent mildew. Use a fan to hasten drying.
6. When books are nearly dry, apply low heat with an electric iron. Separate the pages to prevent musty odors. This is a tedious process that you may want to use only with valuable books.
7. Some chemicals, such as parachlorobenzene, may help stop mold growth. Place books in closed containers with moth crystals to help stop mold growth. Contact your county Extension office for recommendations.
8. When books are thoroughly dry, close them and use C-clamps to help hold their shape.
9. You can freeze books and papers until you have time to work with them. Freezing effectively controls mold growth.
10. Even if books and papers appear to have dried successfully, they may disintegrate because of materials in the floodwater. As a precautionary measure, photocopy important documents or papers, or keep them in a safe deposit box.
11. An excellent source of information is "Procedures for Salvage of Water-Damaged Library Materials" by the Library of Congress, available at your local library.