CONDITION

Automatic dishwasher soap poisoning

Learn what to do after swallowing or coming into contact with automatic dishwasher detergent, including symptoms, first aid, treatment, and when to seek emergency help.

WHAT IT IS
Poisoning from automatic dishwasher detergent exposure

BODY SYSTEM
Digestive system, lungs, eyes and skin

MAIN SYMPTOMS
Mouth or throat burning, vomiting, difficulty swallowing, breathing difficulty

WHAT CAUSES IT
Swallowing, inhaling or contacting detergent chemicals

HOW IT IS DIAGNOSED
Exposure history, examination, imaging or endoscopy

MAIN TREATMENT
Decontamination and supportive care

CAN IT BE CURED?
Sometimes - minor exposures resolve without harm

IS IT AN EMERGENCY?
Sometimes - breathing difficulty, collapse, seizure or unresponsiveness

LONG-TERM OUTLOOK
Most minor exposures resolve, but serious injuries may cause lasting harm

Overview

Automatic dishwasher soap poisoning occurs when dishwasher detergent is swallowed, inhaled into the airway, or exposed to the eyes or skin. Although it is often called "soap," automatic dishwasher detergent contains cleaning chemicals designed for use inside a machine. It is different from liquid dish soap used for handwashing dishes.

Dishwasher detergents are sold as powders, liquids, gels, tablets, and single-use packets or pods. Ingredients vary by product. They may include substances that break down grease and food, soften water, or help remove stains. Some are alkaline, meaning they have a high pH that can irritate or burn tissue. Concentrated packets can release their contents quickly if bitten or squeezed.

A brief taste may cause only mild mouth or stomach irritation. Larger exposures or contact

with a more corrosive product can cause chemical burns. Vomiting may allow detergent to enter the lungs, which is called aspiration. Eye exposure can also injure the surface of the eye.

The effects cannot always be predicted from the amount alone. If someone swallows automatic dishwasher detergent, contact a poison center promptly rather than waiting for symptoms. In the United States, Poison Help is available at 1-800-222-1222 . Call emergency services for breathing difficulty, collapse, a seizure, or inability to wake the person.

Symptoms

Symptoms depend on the product, amount, route of exposure, and whether detergent enters the lungs. They often begin soon after contact, but some injuries may become clearer over time.

Possible symptoms after swallowing include:

Detergent that enters the airway can cause persistent coughing, breathing difficulty, or inflammation in the lungs. Breathing symptoms may occur during choking or vomiting.

Eye exposure may cause burning, tearing, redness, swelling, sensitivity to light, or blurred vision. Powder or concentrated liquid trapped under an eyelid can continue to irritate the eye until it is thoroughly rinsed away.

Skin contact may cause redness, dryness, pain, or a rash. Chemical burns are possible after prolonged contact, particularly if detergent remains under wet clothing or against sensitive skin.

Call emergency services immediately if the person:

Severe pain, repeated vomiting, vomiting blood, significant drooling, inability to swallow, confusion, or persistent breathing symptoms also require urgent medical evaluation.

- Burning or irritation of the lips, mouth, tongue, or throat
- Excess saliva or drooling
- Nausea, vomiting, or abdominal pain
- Pain or difficulty with swallowing
- Coughing, choking, wheezing, or a hoarse voice
- Chest discomfort
- Refusal to eat or drink, especially in a young child
- Blood in vomit or stool after a more serious injury

- Has trouble breathing or has blue, gray, or unusually pale lips
- Collapses, has a seizure, or cannot be awakened
- Has severe choking or rapidly worsening swelling of the mouth or throat

Causes and risk factors

Most exposures are accidental. Young children may mistake colorful detergent packets for candy or toys. A pod can burst when bitten, sending concentrated detergent into the mouth, eyes, or airway. Children may not be able to describe pain or swallowing problems, so behaviors such as drooling or refusing drinks can be important.

Adults may be exposed after transferring detergent into an unmarked container, confusing it with another product, or handling a leaking packet. People with memory, vision, or developmental difficulties may have a higher risk of accidental ingestion.

Risk can also increase when detergent is:

The exact danger depends on the formulation. Some products mainly contain irritants, while others may cause deeper chemical injury. The absence of visible burns around the mouth does not always rule out injury farther down the throat or esophagus, the tube connecting the mouth to the stomach.

Intentional swallowing requires urgent medical assessment, even if the person initially feels well. It should also lead to compassionate evaluation of the circumstances and mental health needs.

- Stored within a child's reach
- Kept outside its original labeled container
- Left in an open dishwasher dispenser before a wash cycle
- Handled with wet hands, which can dissolve a packet
- Mixed with another cleaning product
- Left on the skin or in the eye instead of being rinsed away

Diagnosis

A poison center specialist or clinician will first ask what happened. Helpful details include the exact product name, package type, estimated amount, time of exposure, symptoms, and first aid already given. Keep the container or take a clear photograph of its label, but do not delay

urgent care to find it.

Medical staff may check breathing, heart rate, blood pressure, oxygen level, and alertness. They may examine the mouth, throat, skin, or eyes. A normal-looking mouth does not necessarily show whether the esophagus or stomach has been injured.

Many small, accidental exposures can be assessed by a poison center and observed at home when the person has no concerning symptoms. Testing is not automatically needed for every exposure.

If symptoms suggest significant injury, hospital evaluation may include blood tests or imaging. A chest X-ray may be used when aspiration or lung injury is suspected. In selected cases, clinicians may use a flexible camera called an endoscope to inspect the esophagus and stomach. This is generally considered when symptoms or the product history raise concern for a corrosive injury. The decision and timing are made by the treating team, often with advice from a medical toxicologist or digestive-system specialist.

Treatment and management

Immediate first aid depends on how the exposure occurred.

After swallowing detergent, remove any product still in the mouth and gently rinse the mouth. Do not make the person vomit. Vomiting can expose the throat a second time and may allow detergent to enter the lungs.

Do not try to neutralize the detergent with vinegar, lemon juice, baking soda, or another chemical. Neutralization reactions can release heat and worsen tissue injury. Activated charcoal is generally not useful for corrosive detergents and may complicate vomiting or medical examination. Do not give it unless a poison professional specifically directs you to do so.

A poison specialist may advise a small amount of water or milk in some situations. However, do not give anything by mouth to a person who is drowsy, actively vomiting, having trouble swallowing, or having a seizure. Call Poison Help or the appropriate poison center for instructions based on the exact product and symptoms.

For eye exposure, begin rinsing immediately with plenty of room-temperature running water. Remove contact lenses if this can be done easily. Hold the eyelids open and continue rinsing for at least 15 to 20 minutes. Do not put eye drops, neutralizing chemicals, or other substances into the eye unless a clinician advises it. Persistent pain, redness, light sensitivity, or vision change after rinsing needs urgent eye assessment.

For skin exposure, remove contaminated clothing and rinse the skin thoroughly with running

water. Wash gently without hard scrubbing. Seek medical advice if pain, redness, blistering, or irritation continues.

If powder or mist has been inhaled, move to fresh air without entering an unsafe area. Persistent coughing, wheezing, chest discomfort, or breathing difficulty needs prompt medical evaluation.

Hospital treatment is supportive, meaning it focuses on protecting breathing and treating the effects of the exposure. Care may include oxygen, intravenous fluids, medicines for pain or vomiting, and monitoring. Serious airway swelling may require a breathing tube. Eye injuries may need examination by an ophthalmologist, a doctor who specializes in eye care.

People with deeper digestive-tract injuries may need temporary changes in eating and drinking, specialist care, or treatment of complications. These decisions depend on examination and test results rather than the product category alone.

Complications

Most minor exposures resolve without lasting harm, particularly when first aid and poison-center advice are obtained promptly. Complications are more likely after a concentrated exposure, aspiration, prolonged eye contact, or ingestion of a corrosive formulation.

Possible complications include chemical burns of the mouth, throat, esophagus, or stomach. A deep burn may rarely create a hole, called a perforation, in the digestive tract. Healing can also produce scar tissue that narrows the esophagus. This narrowing, known as a stricture, may later cause food to stick or make swallowing difficult.

Aspiration can inflame or injure the lungs. Signs may include ongoing cough, fast or difficult breathing, wheezing, fever, or low oxygen levels.

Eye exposure can damage the cornea, the clear front surface of the eye. Prompt irrigation reduces the time the chemical remains in contact with the eye.

Emotional distress can also follow a poisoning event. When exposure was intentional, follow-up should address safety and mental health as well as physical recovery.

Follow up

Follow the observation instructions given by the poison center or treating clinician. If home observation is recommended and the person remains well, routine emergency-department

testing may not be necessary.

Seek urgent reassessment if new or worsening symptoms develop, including repeated vomiting, severe chest or abdominal pain, drooling, difficulty swallowing, blood in vomit or stool, persistent coughing, fever, or breathing problems. New trouble swallowing in the days or weeks after an injury also needs medical review because it may signal scar-related narrowing.

After an eye exposure, ongoing pain, redness, light sensitivity, or blurred vision should be evaluated promptly rather than left for a routine appointment.

Routine follow-up may be recommended after a significant burn, aspiration injury, or hospital stay. Depending on the injury, this may involve a primary care clinician, gastroenterologist, lung specialist, or ophthalmologist.

To reduce another exposure, keep dishwasher detergent in its original closed container and store it locked, up high, and out of sight. Close the dishwasher dispenser and package immediately after use. Handle packets with dry hands, and do not transfer detergent to food or drink containers.

Sources

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