CONDITION

Household glue poisoning

Household glue poisoning is harmful illness or injury caused by swallowing glue, breathing its fumes, or getting it on body tissues.

WHAT IT IS
Harmful effects from glue chemicals, fumes, or tissue bonding

BODY SYSTEM
Digestive tract, lungs, nervous system, eyes, and skin

MAIN SYMPTOMS
Nausea, coughing, dizziness, mouth or eye irritation

WHAT CAUSES IT
Glue chemicals, fumes, or rapid tissue bonding

HOW IT IS DIAGNOSED
Exposure history, examination, and targeted tests

MAIN TREATMENT
Decontamination, symptom support, and treatment of tissue injuries

CAN IT BE CURED?
Sometimes - most minor exposures fully resolve

IS IT AN EMERGENCY?
Sometimes - with breathing problems, collapse, seizure, or major burns

LONG-TERM OUTLOOK
Most minor accidental exposures cause no lasting problems

Overview

Household glue poisoning means harmful effects after glue is swallowed, its fumes are breathed in, or it contacts the eyes, skin, or mouth. Some incidents are chemical poisonings. Others involve burns, choking, or body parts becoming stuck together.

The risk depends heavily on the product. Water-based white school and craft glues are generally low in toxicity. A small accidental taste may cause no symptoms or only mild stomach upset.

Solvent-based products, such as some contact adhesives, rubber cements, model glues, and construction adhesives, may be more dangerous. Their solvents are chemicals that evaporate into the air. Breathing a concentrated amount can affect the brain, lungs, and heart.

"Super glue," or cyanoacrylate adhesive, behaves differently. Moisture makes it harden quickly, so it may bond skin, eyelids, lips, or teeth. It usually causes a local injury rather than poisoning throughout the body. Contact with cotton or wool can produce enough heat to cause a burn.

Hot glue mainly causes a heat burn rather than chemical poisoning. Because glue products differ, the container and ingredient label are important when seeking advice.

Symptoms

Symptoms may begin within minutes. Lung problems after swallowing or inhaling a solvent-containing glue can sometimes develop over several hours.

After swallowing glue, possible symptoms include:

Breathing fumes may cause headache, nausea, dizziness, coughing, and irritation of the eyes, nose, or throat. A large exposure in an enclosed space may lead to severe confusion, loss of consciousness, abnormal heart rhythm, or slow or difficult breathing.

Glue in the eye may cause pain, watering, redness, blurred vision, or bonded eyelids. Super glue can stick to the eye's surface and cause scratches or other injuries.

Skin exposure may cause redness or irritation. Super glue usually causes firm bonding rather than systemic poisoning. A hot or burning feeling, blistering, or severe pain may indicate a thermal or chemical burn.

Repeated intentional inhalation can cause ongoing problems with memory, coordination, mood, sensation, or muscle strength. The exact effects depend on the solvents involved.

- A bad taste, mouth irritation, nausea, vomiting, or stomach pain
- Coughing, choking, gagging, or difficulty swallowing
- Sleepiness, dizziness, confusion, or poor coordination
- Glue stuck to the lips, teeth, tongue, or inside the mouth

Causes and risk factors

Poisoning happens when the ingredients or physical properties of a glue cause harm. The main risks come from solvents, aspiration, rapid bonding, and heat.

Aspiration means liquid enters the lungs instead of the stomach. Thin, solvent-containing adhesives can be particularly harmful if they enter the lungs during swallowing or vomiting.

Risk may be higher when:

A dried piece of ordinary water-based glue is usually less concerning than liquid solvent glue. However, any piece large enough to block the airway remains a choking risk.

- A solvent-based product is used in a small, poorly ventilated room
- A child swallows glue or cannot describe what happened
- The product is transferred into a drink or food container
- Someone deliberately breathes glue fumes to become intoxicated
- Super glue contacts the eye, mouth, cotton, wool, or a large skin area
- Several products are mixed or used near heat, sparks, or flames
- The product type, ingredients, or amount are unknown

Diagnosis

There is no single test that confirms every type of household glue poisoning. Assessment begins with the product name, ingredients, route of exposure, approximate amount, timing, and symptoms.

Keep the container or take a clear photograph of its label if this can be done safely. Do not bring a leaking or heavily contaminated container into a vehicle or healthcare building without instructions.

A healthcare professional may check breathing, alertness, heart rate, blood pressure, oxygen level, skin, mouth, and eyes. If the exposure was minor and there are no symptoms, tests may not be needed.

People with significant symptoms may need an electrocardiogram, which records the heart's electrical activity. Blood tests can look for effects on the body's acid balance, kidneys, liver, or other organs. A chest X-ray may be used when aspiration or lung injury is suspected, although early findings can sometimes be normal.

An eye examination may use dye and magnification to look for scratches or other damage. Imaging or a camera examination of the digestive tract is reserved for situations such as suspected blockage or significant internal injury.

Treatment and management

Treatment depends on the glue and how exposure occurred. A poison centre can give product-specific advice. Do not make yourself or someone else vomit unless a poison

specialist specifically directs it. Vomiting can pull solvent-containing glue into the lungs.

After swallowing glue, remove any visible product from the mouth and rinse gently. Do not give food or drink to someone who is very drowsy, is vomiting repeatedly, is having a seizure, or has difficulty swallowing.

After breathing fumes, move into fresh air without entering an unsafe or heavily contaminated space. Open doors or windows only if this can be done without further exposure. Keep the product away from flames because many solvent vapours are flammable.

For glue on the skin, remove contaminated clothing and wash with soap and water. Do not pull bonded skin apart forcefully. Super-glued skin can often be soaked in warm, soapy water and gently rolled apart over time. Do not use acetone or another solvent near the eyes, mouth, broken skin, or a burn unless a poison specialist or healthcare professional advises it.

For eye exposure, begin rinsing with clean, lukewarm water. Do not force super-glued eyelids open or use solvents near the eye. Eye exposure needs prompt professional advice, even if vision seems normal.

If super glue reacts with cotton or wool and becomes hot, stop contact with the material and cool the burn with running water. Do not pull away fabric that is firmly stuck to burned skin.

Hospital treatment is mainly supportive, meaning it protects breathing, circulation, and other body functions while the exposure passes. It may include oxygen, breathing support, heart monitoring, intravenous fluids, and care for burns or eye injuries. There is no single antidote for all glue products.

Complications

Most small accidental exposures to water-based glue do not cause complications. More serious outcomes are linked to solvent products, aspiration, burns, eye contact, or a large exposure.

Possible complications include:

Repeated intentional inhalation may damage the brain and nerves. Some solvents can also affect the kidneys, liver, blood chemistry, or hearing. These risks differ between products and are not expected after a minor, one-time exposure to ordinary school glue.

- Lung inflammation after glue or vomit enters the lungs
- Airway blockage from choking, swelling, or a hardened glue mass
- Corneal scratches or other injuries to the eye's surface

- Skin burns, including heat burns from super glue and cotton
- Abnormal heart rhythms after concentrated solvent exposure
- Brain injury when severe exposure prevents enough oxygen reaching the brain
- Digestive blockage from a hardened or expanding adhesive mass

Prevention

Most household glue exposures can be prevented. Store glue in its original labelled container, securely closed and out of children's reach. Never move adhesive into a cup, bottle, or food container.

Use solvent-based products outdoors or with the ventilation required on the label. Avoid flames, cigarettes, heaters, and sparks. Use eye protection, gloves, or other protective equipment when the product instructions call for it.

Keep super glue away from cotton and wool. Cover work surfaces and use only the amount needed. Do not hold glue caps or small adhesive parts in your mouth.

Glue fumes should never be deliberately inhaled. If you or someone close to you is repeatedly using inhalants, confidential medical or substance-use support can help reduce the immediate risk and address the reasons for use.

Living with it and what to expect

A small taste of water-based school glue often causes little more than brief mouth or stomach discomfort. When symptoms occur, they commonly settle after the exposure stops. New coughing, breathing difficulty, or unusual sleepiness is not part of a routine recovery and needs medical advice.

Irritation from mild fumes may improve after moving to fresh air. Symptoms after a concentrated or prolonged exposure can last longer, and lung irritation may become noticeable over the following hours. Follow any observation instructions given by a poison centre or healthcare service.

Bonded skin usually separates gradually as the outer skin layer naturally sheds. Pulling it apart can tear the skin and delay healing. Eye injuries and burns may need follow-up over days or weeks, depending on their depth and location.

A single minor accidental exposure is not expected to become a chronic condition. Long-term problems are more likely after a major event that injures the lungs, brain, eyes, or skin, or after

repeated solvent inhalation. Recovery in those situations is influenced by the chemical, length of exposure, and severity of the initial injury.

When to get medical help

Call emergency services now if someone:

Do not enter a contaminated enclosed space to rescue someone unless emergency responders say it is safe.

Contact a poison centre promptly after swallowing solvent-based, construction, model, or unknown glue. Also seek prompt advice after intentional inhalation, more than a small accidental taste, any eye exposure, or exposure involving a young child. In the United States, Poison Help is available at 1-800-222-1222. Elsewhere, use your local poison information service.

Arrange routine medical follow-up for a cough, dizziness, headaches, skin injury, or eye discomfort that does not settle as expected. Repeated glue inhalation also deserves medical support, even if there is no immediate emergency.

- Has trouble breathing, blue or grey lips, or severe choking
- Collapses, has a seizure, or cannot be awakened
- Has severe confusion, chest pain, or an irregular heartbeat
- Has a serious burn or rapidly worsening swelling
- Is trapped in a space with concentrated fumes

Common questions

Is school glue poisonous if swallowed?

Most white, water-based school glues have low toxicity. A small accidental taste may cause mild nausea or stomach upset. Check the label, rinse the mouth, and contact a poison centre if more than a small amount was swallowed, symptoms develop, or the product is uncertain.

What happens if I swallow super glue?

Super glue usually hardens quickly when it touches saliva. It may stick to the lips, tongue, teeth, or inside of the mouth rather than being absorbed as a systemic poison. Do not pull bonded tissues apart or apply solvents inside the mouth. Get prompt advice if there is choking, difficulty swallowing, breathing trouble, or a large amount was involved.

Should I make myself vomit after swallowing glue?

No. Do not induce vomiting unless a poison specialist specifically tells you to do so. Vomiting can cause solvent-containing glue to enter the lungs, where it may cause serious inflammation.

Can glue fumes make you sick?

Yes. Solvent fumes can cause headache, dizziness, nausea, eye or throat irritation, confusion, and poor coordination. Concentrated exposure may affect breathing or heart rhythm. Move to fresh air safely and seek urgent help for severe or persistent symptoms.

How do I get super glue off my skin or eye?

For skin, soak the area in warm, soapy water and gently roll the bonded surfaces apart. Do not pull forcefully. For the eye, rinse with lukewarm water, do not force the eyelids open, and get prompt poison-centre or medical advice. Never put acetone in the eye.

Is dried household glue dangerous?

A small piece of dried water-based glue is usually low risk, although it can still be a choking hazard. Dried construction adhesives may contain different ingredients, and a large hardened piece can cause blockage if swallowed. Check the product label and seek advice if symptoms occur.

Sources

- MedlinePlus Medical Encyclopedia - Household glue poisoning
- National Capital Poison Center - Is glue toxic?
- National Capital Poison Center - Is super glue toxic?
- CDC National Institute for Occupational Safety and Health - NIOSH Pocket Guide to Chemical Hazards: Toluene
- Royal Children's Hospital Melbourne - Clinical Practice Guideline: Hydrocarbon poisoning
- Agency for Toxic Substances and Disease Registry - Toxicological Profile for Toluene