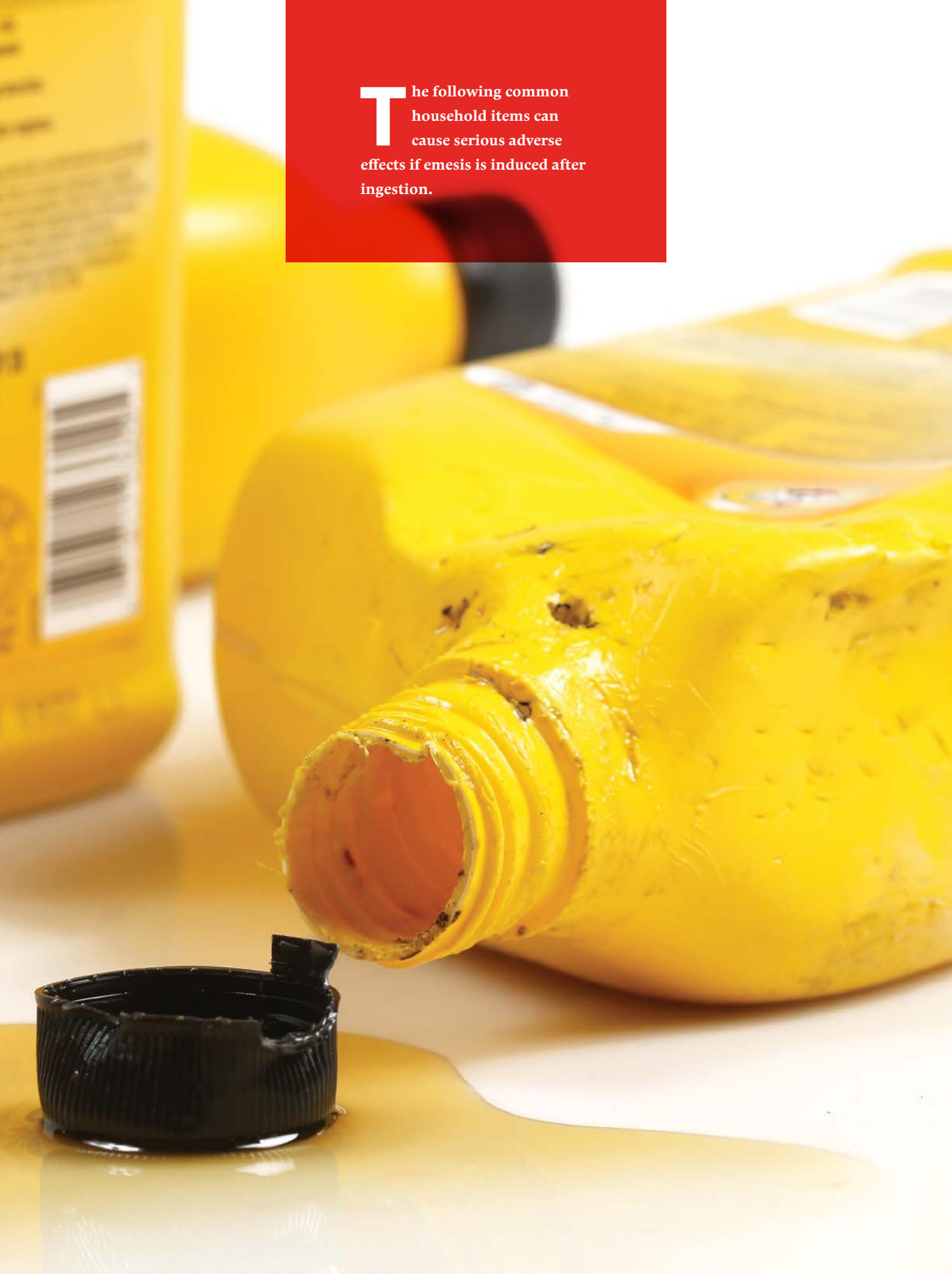


TOP 5 INGESTIONS THAT NEVER REQUIRE INDUCTION OF EMESIS

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The following common household items can cause serious adverse effects if emesis is induced after ingestion.





1

▲ Disc-shaped lithium batteries can cause severe GI ulceration if punctured.



2

▲ Laundry detergent pods are commonly ingested by dogs and can cause oral or esophageal irritation and aspiration.

TOP 5 INGESTIONS THAT NEVER REQUIRE INDUCTION OF EMESIS

1. Acidic and alkaline cleansers
2. Batteries
3. Detergents
4. Hydrocarbons
5. Antidepressant medications

Emesis induction is an effective way to enable gastric decontamination in dogs and cats that have ingested certain toxic substances; however, inducing emesis is not always recommended, including situations when the animal has already vomited, is very drowsy or unconscious, is bradycardic, is exhibiting seizure activity, has a diminished cough reflex, or has an underlying condition (eg, megaesophagus or laryngeal paralysis) that could predispose it to aspiration.^{1,2} Serious cardiac, respiratory, GI, or neurologic disease can also increase the risk for complications during emesis induction.

1 Acidic and Alkaline Cleansers
Many household cleaners, including drain cleaners, toilet bowl cleaners, metal cleaners, and antirust compounds contain acids and alkalis that are severely corrosive. Dogs and cats can be exposed dermally or by accidental ingestion, causing severe injuries to the eyes, skin, GI tract, or lungs.³ Because of their bitter taste,

these products often cause pain immediately on contact.

Clinical signs can include drooling, pawing at the mouth, difficulty swallowing, oral ulceration, ocular ulcers, dermal redness, vomiting, and abdominal pain. Treatment includes immediate decontamination by flushing the exposed area with tepid water, administration of antiulcer medication, and supportive care.³

Decontamination by emesis induction is not recommended because of the risk for esophageal injury and possible aspiration when the toxicant is vomited.

2 Batteries
Ingestion of batteries can lead to serious consequences. Typically, alkaline dry cell batteries (eg, 9-volt, AA, AAA, C, D) or disc-shaped (eg, button) lithium batteries (**Figure 1**) are ingested. These are dangerous because when they are



▲ Petroleum distillates pose a high aspiration risk if vomiting is induced after they are ingested.

punctured or swallowed, alkaline or acidic material can leak out and cause a severe corrosive injury. Also, if a battery lodges in the esophagus, electrical current passing through the tissues can cause ulceration.³

Signs associated with ingestion and puncture can include drooling, oral pain, pawing at the mouth, vomiting, inappetence, difficulty swallowing, abdominal pain, or fever. If the battery is in the esophagus or has been chewed or split apart, prompt removal via endoscopy or surgery is recommended.

Inducing emesis is not recommended because of the risk for esophageal perforation if corrosive material leaks into the esophagus. Instead, treatment should be initiated immediately after ingestion by carefully flushing the mouth with tepid water for 15 to 20 minutes. Batteries within the stomach or intestines that appear intact on radiographs can sometimes pass without incident within 24 to 48 hours.³

3 Detergents

Detergents are found in commonly used household products such as liquid laundry detergents, laundry detergent pods, fabric softeners, and enzymatic cleaners. The majority of cats exposed to these products walk through spilled detergent, then groom and orally ingest the detergent. Conversely, the majority of dogs are exposed by biting into laundry detergent pods that they mistake for toys or treats (*Figure 2*). Once laundry detergent pods are exposed to saliva, they dissolve and the concentrated contents can be swallowed.

Detergents can cause corrosive injury to the mouth and esophagus, particularly in cats. Clinical signs include drooling, oral burns, pawing at the mouth, inappetence, vomiting, hematemesis, and lethargy. In some cases, detergent foam is inhaled, leading to lung injury and difficulty breathing. Because of the risk for aspiration of detergents into the lungs, emesis induction is not recommended and treatment instead consists of dilutional therapy with water or milk until resolution of signs as well as IV fluids to maintain hydration.³

4 Hydrocarbons

Hydrocarbons are organic substances primarily composed of carbon and hydrogen molecules that are derived from either petroleum or wood. They are commonly found in garages or workshops. Petroleum distillates include liquid fuels such as kerosene, gasoline, engine oil, tiki-torch fuels, diesel fuel, liquid lighter fluid, and lubricating oil (*Figure 3*). Wood-derived hydrocarbons include turpentine, paint solvents, wood stains, or strippers. Some of these products can be mixed with antifreeze, which can lead to severe acute kidney injury and death in dogs and cats.



▲ A dog that was admitted for altered mentation after an accidental ingestion of its owner's selective serotonin reuptake inhibitor (antidepressant) medication.

Depending on the hydrocarbon or other compounds ingested, clinical signs can be mild-to-severe and include vomiting, drooling, dermal or ocular irritation, ataxia, or coma. Some petroleum products cause cardiac arrhythmias. Vomiting should never be induced after hydrocarbon ingestion because of the risk of aspiration pneumonia if vomitus is inhaled into the lungs. Immediate intervention is warranted and determined by the substances ingested. Treatments can include IV fluids, antiarrhythmic medications, and management of chemical pneumonitis (ie, oxygen, nebulization, coupage).³

5 Antidepressant Medications
As a result of the increase in human and veterinary patients taking antidepressant medications such as selective serotonin reuptake inhibitors (SSRIs), the risk for accidental ingestion of these medications is one of the top unintentional poisonings seen in dogs.⁴

Clinical signs of SSRI ingestion include CNS stimulation or sedation, inappetence, and behavioral changes (**Figure 4**). With large ingestions, serotonin syndrome can occur, resulting in severe changes in mentation, panting, agitation, hypersalivation, vocalization, tremors, seizures, hyperthermia, or mydriasis.⁴

Treatment includes sedation (if needed), cooling measures (if appropriate), IV fluids, blood pressure and electrocardiography monitoring, and supportive care. Because these medications have a rapid onset of action and because neurologic signs are seen in 80% of affected dogs,⁵ emesis induction is typically not recommended because of the aspiration risk.

Conclusion

Many household items or medications can cause severe signs of toxicity when ingested by dogs and cats; however, in certain situations, emesis must not be induced given the risk of aspiration and other serious consequences. For more information, consult an animal poison control center (ASPCA Animal Poison Control [aspc.org/pet-care/animal-poison-control] or Pet Poison Helpline [petpoisonhelpline.com]). ■

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