Ammonia Safety Stats and Facts



FACTS

1. Symptoms of anhydrous ammonia exposure include the following:

- eye, nose, and throat irritation
- breathing difficulty, wheezing, or chest pain;
- burns, blisters, and frostbite
- pulmonary edema, and pink frothy sputum.

2. The highest risk comes from breathing the gas, which can be fatal. The level of danger depends on the concentration of ammonia and how long you've been exposed to it.

3. Gas leaks from production, storage, or transportation facilities of ammonia. People who work in such facilities are at an increased risk for inhalational and dermal exposure.

4. A high level of ammonia may be present in the air after the application of ammonia-containing fertilizers in the soil. Farmers who rely on ammonia-based fertilizers are at an increased risk for inhalational exposure.

5. Household and industrial cleaners contain anywhere from 5% to 25% of ammonia in dissolved form. Residents, especially children of such households, are at an increased risk for accidental ingestion exposure. The spillage of such products can lead to significant inhalational exposure as well.

6. Ammonia is produced by decaying manure. Farmers who work in animal confinement buildings are at an increased risk for inhalational exposure.

STATS

- The 2017 annual report of the American Association of Poison Control Center's National Poison Data System reported 1846 single exposures to ammonia with 15 major adverse events and no deaths.
- They also reported 1366 single exposure to ammonia-containing glass cleaners and 489 single exposures to ammonia-containing all-purpose cleaners with no reported deaths in either case.
- Exposure to ammonia is almost always unintentional. Ingestion of ammonia-

containing cleaners occurs predominantly in children and is accidental. However, 9.2% of household exposure is intentional and occurs mostly in adults.

- Ammonia is considered a high health hazard because it is corrosive to the skin, eyes, and lungs. Exposure to 300 parts per million (ppm) is immediately dangerous to life and health. Ammonia is also flammable at concentrations of approximately 15% to 28% by volume in air.