
Information and recommendations for patients

- Patients exposed only to sulfur dioxide gas do not pose a significant risk of secondary contamination. Patients whose clothing or skin is contaminated with liquid sulfur dioxide (boiling point -10°C , 14°F , respectively) can secondarily contaminate rescue and medical personnel by direct contact or through off-gassing sulfur dioxide.
 - Sulfur dioxide gas is rapidly corrosive when it comes in contact with moist tissue such as the eyes, skin, and upper respiratory tract causing eye irritation, coughing, chest pain, dyspnea, and asthmatic symptoms. Swelling of the throat and signs of accumulation of fluid in the lungs (shortness of breath, cyanosis, expectoration, cough) may occur.
 - There is no antidote to be administered to counteract the effects of sulfur dioxide. Treatment consists of supportive measures.
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Substance information

Sulfur dioxide (SO₂), CAS 7446-09-5

Synonyms: sulfurous anhydride

Sulfur dioxide is, at room temperature, a colorless, nonflammable gas with a pungent, irritating, suffocating sulfur odor. Under pressure or at temperatures below -10°C (14°F), it is a clear liquid. Sulfur dioxide is soluble in water and forms sulfurous acid (H₂SO₃).

Sulfur dioxide is used in ore and metal refining, chemical manufacturing, wood pulp treatment in paper manufacturing, extracting lubricating oils, as a preservative, fumigant, disinfectant, reducing agent, antioxidant in magnesium processing, bleaching agent, fungicide, insecticide, and as a food additive or preservative.

What immediate health effects can result from exposure to sulfur dioxide?

Most exposures to sulfur dioxide occur from breathing the gas.

Exposure to small amounts usually causes eye, nose, and throat irritation with tearing of the eyes, sore throat, coughing, and asthmatic symptoms. Extended exposure can cause severe breathing difficulty, which may lead to chemical pneumonia and death.

Are any future health effects likely to occur?

A single small exposure from which a person recovers quickly is not likely to cause delayed or long-term effects. Some people who have had serious exposures have developed permanent breathing difficulty and tended to develop lung infections easily.

Follow-up instructions

Keep this page and take it with you to your next appointment. Follow only the instructions checked below.

- () Call your doctor or the Emergency Department if you develop any unusual signs or symptoms within the next 24 hours, especially:
 - coughing or wheezing
 - difficulty breathing or shortness of breath
 - increased pain or a discharge from exposed skin or eyes
 - chest pain or tightness
- () No follow-up appointment is necessary unless you develop any of the symptoms listed above.
- () Call for an appointment with Dr. _____ in the practice of _____
When you call for your appointment, please say that you were treated in the Emergency Department at _____ Hospital by _____ and were advised to be seen again in _____ days.
- () Return to the Emergency Department/_____ Clinic on (date) _____ at _____ am/pm for a follow-up examination.
- () Do not perform vigorous physical activities for 1 to 2 days.
- () You may resume everyday activities including driving and operating machinery.
- () Do not return to work for _____ days.
- () You may return to work on a limited basis. See instructions below.
- () Avoid exposure to cigarette smoke for 72 hours; smoke may worsen the condition of your lungs.
- () Avoid drinking alcoholic beverages; alcohol may worsen your clinical conditions.
- () Avoid taking the following medications: _____

- () You may continue taking the following medication(s) that your doctor(s) prescribed for you: _____

- () Other instructions: _____

Signature of patient _____ Date _____
Signature of physician _____ Date _____

References

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