

GAS	WATER SOLUBILITY	PRINCIPAL SITE OF RESPIRATORY INJURY
Ammonia	High	Primarily proximal airways, but entire respiratory tract may be affected
Chlorine	Intermediate	Upper and lower respiratory tract
Nitrogen dioxide	Low	Primarily terminal bronchioles and alveoli, but entire respiratory tract may be affected
Phosgene	Low	Alveoli
Sulfur dioxide	High	Proximal and distal airways, including alveoli and bronchioles

POISONINGS AND EXPOSURES

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Thanks Missah! Welcome to the fourth lesson, where we will talk about exposures to poisonous substances, and the resultant effects. We will also look into the scene safety measures required, the symptoms to look out for, assessments, and the treatments for such exposures.

Good studying.

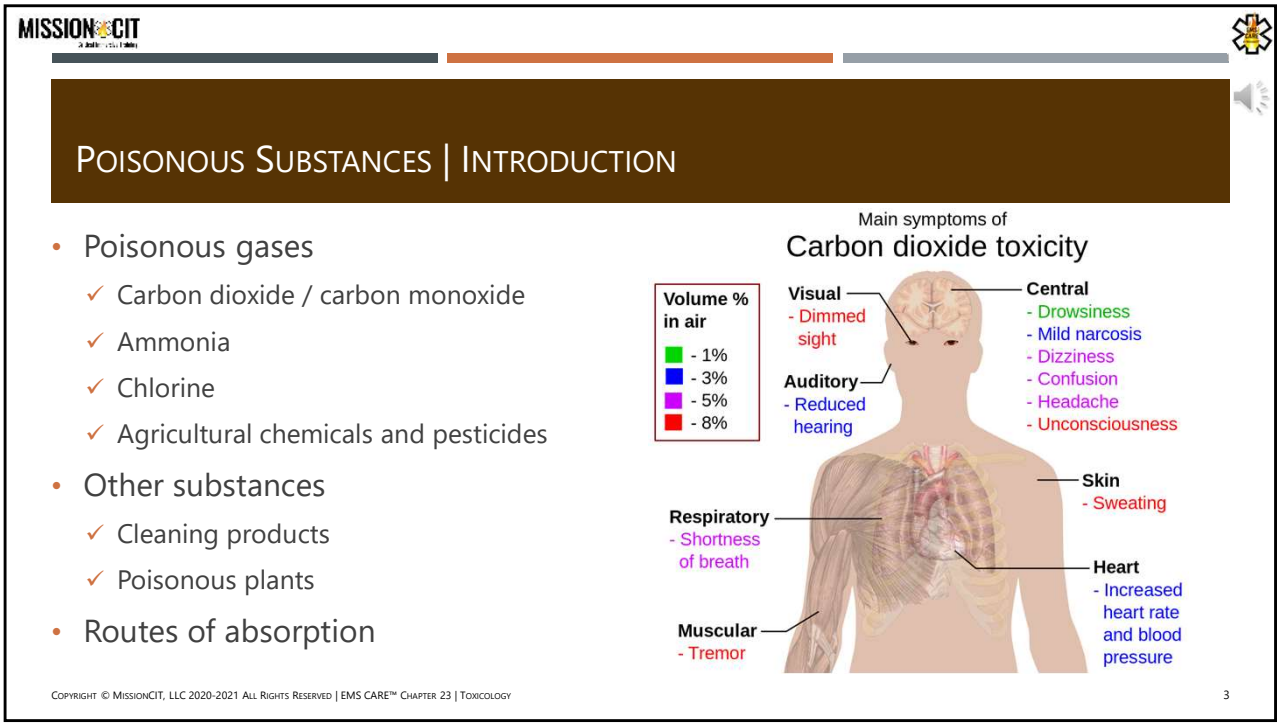
Scene Safety

- Safety first
- Wear protective clothing
- Carry breathing apparatus
- Call for help if needed
- Move patient to safety
- Provide immediate care
- Arrange for emergency transportation



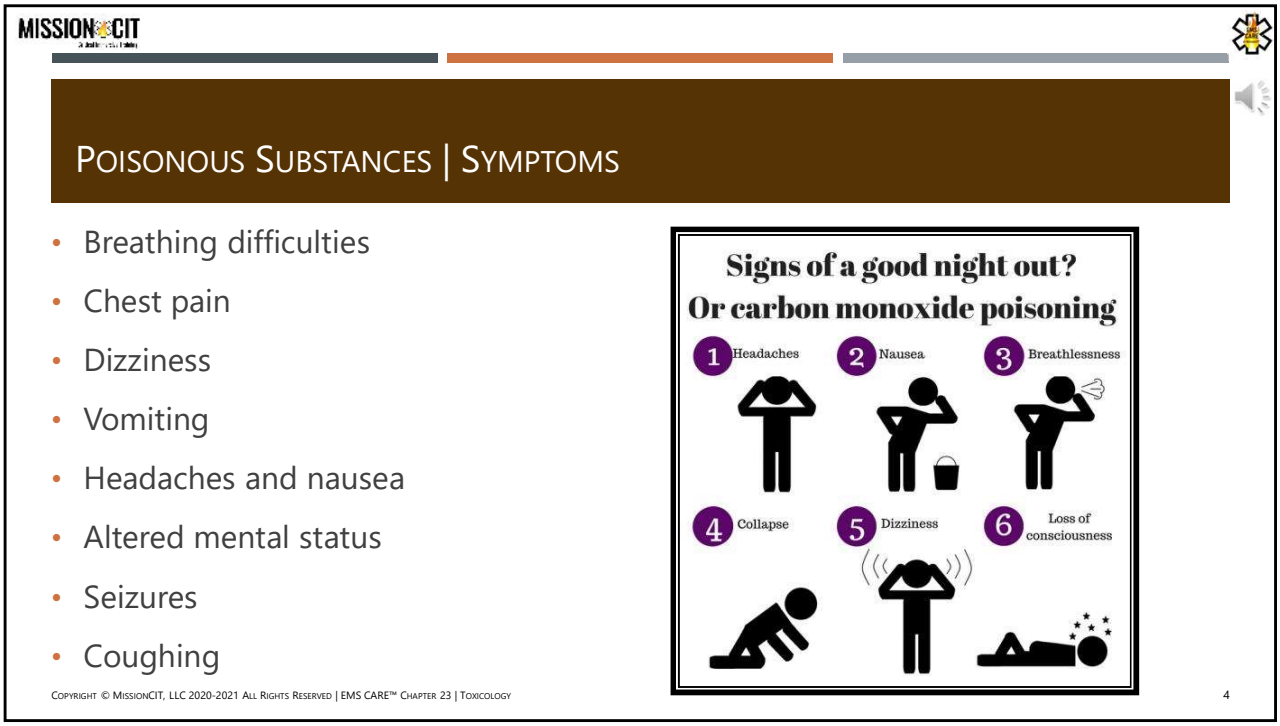
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One of the first aspects to keep in mind during exposures and poisoning is the safety of the patients and the first responders, so everything must be done towards it.
First off, approach the scene with caution, and be aware of what you're getting into. Ideally, wear protective clothing and may be even a self-contained breathing apparatus. If you're unsure of the situation, call for help or additional resources. Once you're safe, look for the patients, and move them to safety immediately. Provide the necessary care and arrange for emergency transportation.



Now, it's important to understand the possible cause of the exposure or poisoning, so the necessary treatment can be given for the same.
If you're dealing with poisonous gas, it could be carbon monoxide, ammonia, chlorine gas, agricultural chemicals and pesticides, and carbon dioxide.
Other exposures could include poisonous plants and household cleaning products.
Earlier, we saw the different routes of poison absorption, so these chemicals and gases can enter the body through any of these routes. In the case of

gases, inhalation is the most likely route, but in the case of exposure to poisonous plants and chemicals, it can be through absorption or ingestion.

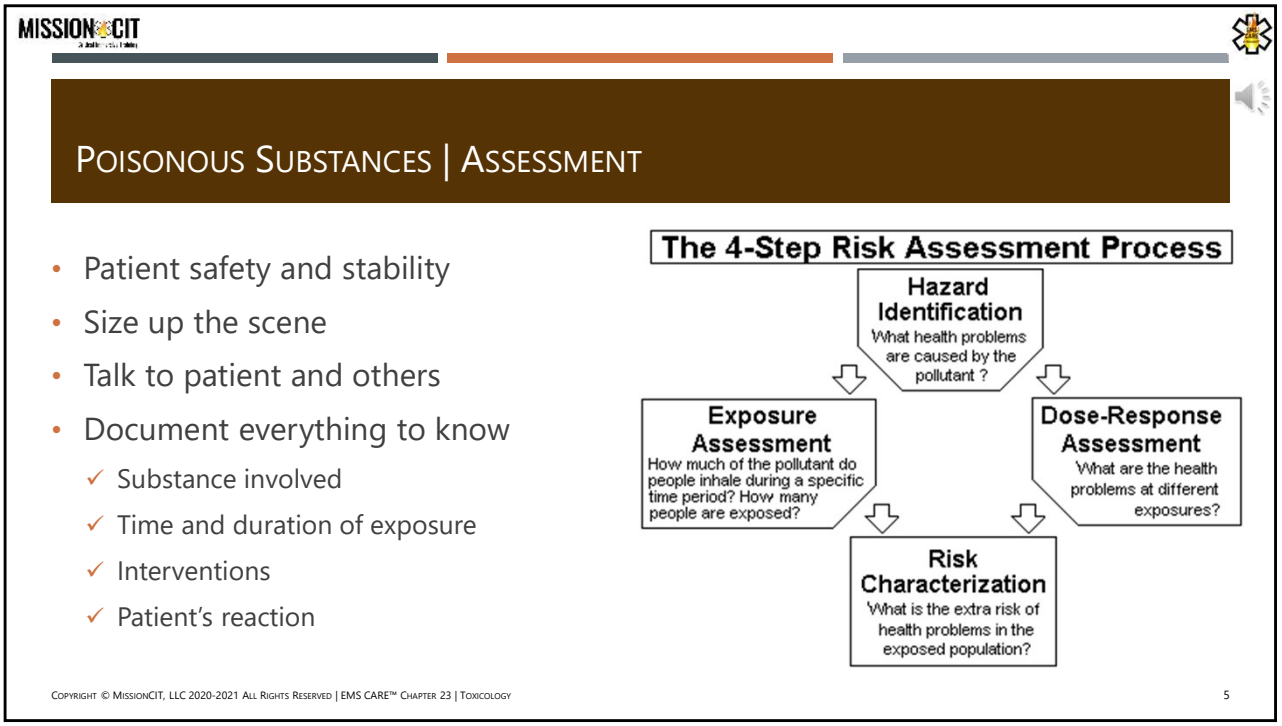


Regardless of the route of absorption, some of the common symptoms that come from exposure to poisonous gases and substances include,

- Breathing difficulties
- Chest pain
- Dizziness
- Vomiting
- Headaches and nausea
- Altered mental status

- Seizures
- Coughing

In severe cases, the patient can be in a coma or may even be battling for life when you find them.



Your first responsibility is to bring the patients to safety and stabilize them. Call for additional help or resources if required to do this.

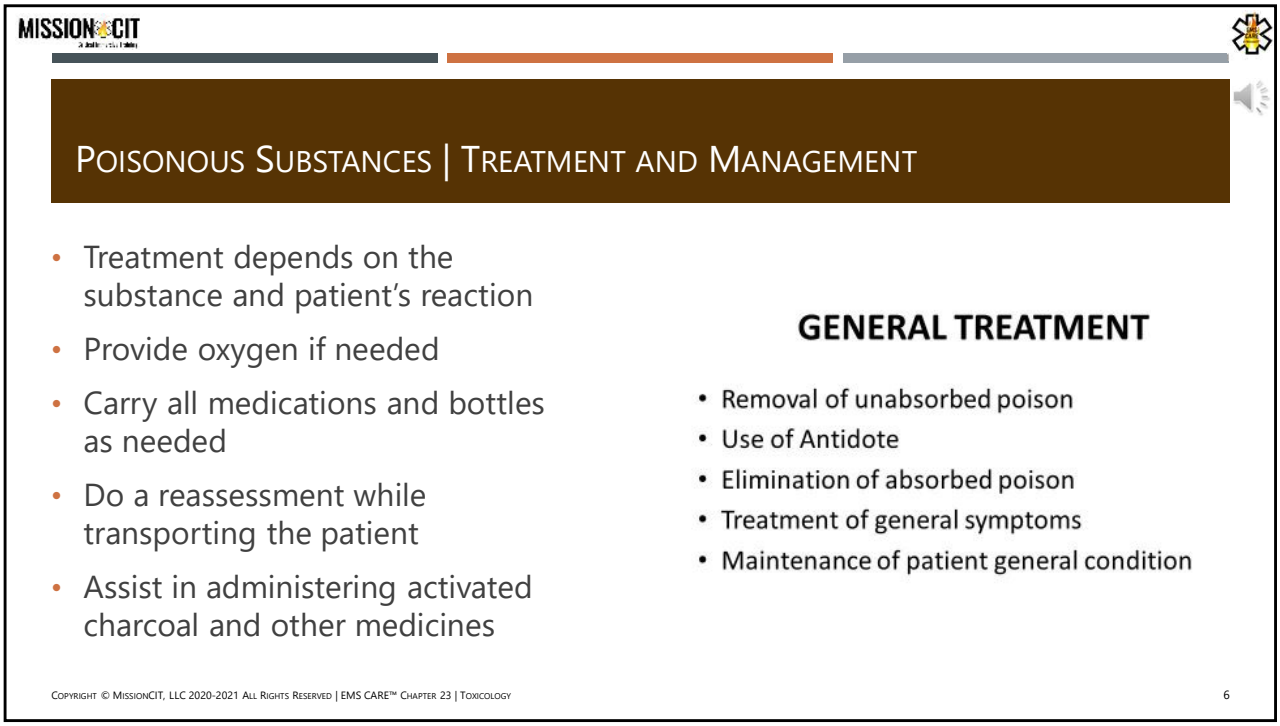
In the meantime, assess the situation, and gather as much information as you can.

Once the patient is stable, talk to the patient to understand the situation. Likewise, talk to family members, neighbors, and friends as well, to get a better idea of the situation.

While doing all this, make sure to note down the facts.

Finally, put it all together to assess the situation, so appropriate treatment can be given to the patient.

Your assessment should tell the substance that was involved, including its exact name, the time and duration of exposure, interventions that were taken, and the patient’s reaction to it.



Once you have answers to all the questions, it is time to start the treatment. The exact course of treatment will depend on the substance and the patient's reaction to it.

In the meantime, if you are transporting the patient, provide oxygen if needed. Also, make sure you carry all containers, bottles, and medications that the patient may need, and do a reassessment on the way.

Assist in the administration of activated charcoal and other medications as needed.

With this, we have come to the end of this lesson. In the

next lesson, Missah will talk about medication overdose.