

Biolab Incident Resource Guide

Oct. 2024

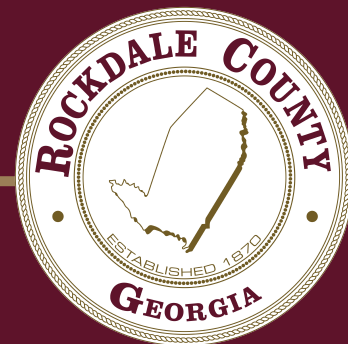


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Overview of Incident

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At approximately 5:30 am on Sunday, September 29, 2024 Rockdale County Fire Rescue responded to a roof fire at Biolab in Conyers, GA.

The building at Biolab contained Chlorine compounds and is a water reactive chemical. Resulting in a plume. Rockdale County and Emergency response agencies from across the state responded to assist, including Environmental Protection Agency, The Environmental Protection Division, Georgia Emergency Management and local first responders from neighboring counties.

Biolab Incident 2024, Frequently Asked Questions

1. What are the chemicals being detected by EPA air monitoring?

- o Chlorine, chloramine and chlorine compounds
- o EPA air quality detectors are monitoring the following as well:
 - Carbon Monoxide
 - Hydrogen Chloride
 - Phosgene

2. Is the water safe?

Rockdale County's drinking water remains safe. Water samples are being tested three times daily, and all results have returned safe levels. Streams downstream from the Biolab facility do not feed into the Hanes Watershed, the source of Rockdale County's drinking water.

3. Why is the shelter in place only for the evening?

In the evening atmospheric inversion is occurring trapping air and pollution, and the harmful chemicals closer to the ground. This causes unhealthy spikes in air quality for people not sheltering in place in the evening.

Why is it different than during the day? During the day, the sun heats the Earth's surface, warms the air near the ground. At night, with no sunlight, the ground loses heat and the air near the surface cools. The air higher up doesn't cool as fast, so you end up with cooler air near the ground creating inversion.

The recommended shelter in place is 7pm as the sun is beginning to set.

4. What are the possible reactions to chlorine compounds?

Smoke that contains chlorine compounds can cause various symptoms including irritation of the eyes and airways, coughing, shortness of breath, difficulty breathing, chest tightness, a scratchy throat, irritated sinuses, headaches, stinging eyes, or a runny nose. People with heart disease might experience chest pain, palpitations, shortness of breath, or fatigue. People with lung disease may not be able to breathe as deeply or as vigorously as usual, and they may experience symptoms such as coughing, phlegm, chest discomfort, wheezing, and shortness of breath.

5. If you are feeling sick, what do you do?

It's important to protect your health from the plume that contains chlorine compounds. Here's what you can do:

- o Stay indoors and avoid outdoor activities.
- o Keep your home's air clean by closing windows and doors. Use your air conditioner only if it recirculates indoor air.
- o Older adults, children, and those with weakened immune systems should limit time outside to avoid smoke.
- o If you have asthma or lung issues, follow your doctor's advice on managing your condition.
- o While chlorine levels are currently safe, follow local emergency guidelines. If you experience symptoms, contact your healthcare provider or the Georgia Poison Center at 404-856-6252.

Press Releases

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ROCKDALE COUNTY PRESS RELEASE

**For Immediate Release
October 7, 2024**

Contact: Melisa Mims, Director
Department of Public Relations
(770) 278-7013

Rockdale County Lifts Shelter in Place Except for the 2-Mile Radius Around Biolab

ROCKDALE COUNTY, Ga. – Rockdale County Emergency Management Agency lifts shelter in place except for the two-mile radius around Biolab.

This recommendation is based on data over the last five consecutive days. Readings have not indicated exceedances of chemicals in the air that would require sheltering in place for areas outside of the two-mile radius. This two-mile radius includes a half-mile buffer zone.

Rockdale County residents and businesses within a 2-mile radius of Biolab should continue to shelter in place from 7:00 pm to 7:00 am until further notice.

This recommendation reduces the number of those affected by the shelter-in-place and alleviates the associated obstacles. Air monitoring will continue across the county, including areas around schools, nursing homes, and other sensitive areas. General monitoring will continue throughout the county.

Please continue to monitor Rockdale County's social media and website (www.rockdalecountyga.gov) for all updates, as this information is fluid.

We appreciate the public's patience during this incident.

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ROCKDALE COUNTY PRESS RELEASE

**For Immediate Release
October 1, 2024**

Contact: Melisa Mims, Director
Department of Public Relations
(770) 278-7013

Rockdale County Provides Critical Update on Ongoing Biolab Incident

ROCKDALE COUNTY, Ga. – Rockdale County held a press conference today to provide updates on the ongoing Biolab incident. Rockdale County Chairman Oz Nesbitt Sr., Conyers Mayor Vince Evans, along with representatives from the Environmental Protection Agency (EPA) and Georgia Emergency Management Agency (GEMA), Lynn Paxton, the Interim Director for Gwinnett, Newton, and Rockdale Health District, and key County Leadership, including the Rockdale EMA Director and Fire Chief, addressed the public. They reassured the community that efforts were underway to manage the emergency swiftly and safely.

At 3:30 a.m., on Oct. 1, 2024, a notification came in from operations at Biolab that a plume was hovering over the county because of over-gassing of the product. The plume has been moving across the county, influenced by the weather. The EPA has been actively monitoring air quality. Residents are urged to shelter in place if the plume or smell of chlorine is over their area until the cloud has passed. This is especially critical for individuals with respiratory conditions. It is essential to stay aware of the wind shifts. Due to inversion, the plume is more prone to shift during the evening, and it is recommended to stay inside during evening hours if possible and keep emergency alert notifications on your phone active.

Biolab leadership is collaborating with Rockdale County Fire Services are working to neutralize and contain the chemical plume as efficiently as possible. The process involves controlled efforts to minimize the plume's impact. The EPA and other officials have been fully briefed on the strategy. Health officials confirmed that air quality levels remain below harmful thresholds for the general public.

The EPA is monitoring air quality in real-time, and residents can access updates through the EPA website at [epa.gov/current-events](https://www.epa.gov/current-events).

Water Safety:

Rockdale County's drinking water remains safe. Water samples are being tested three times daily, and all results have returned safe levels. Streams downstream from the Biolab facility do not feed into the Hanes Watershed, a source of the county's drinking water.

Health Recommendations:

Air conditions will fluctuate throughout the day and evening. Being outdoors during daylight hours is generally safe, but those with pre-existing respiratory conditions should remain indoors.

If you need to conduct essential business or gather supplies, do so during the day and remain vigilant about wind shifts. Due to evening atmospheric inversion, the plume is more likely to shift during nighttime hours. It is

recommended that residents stay indoors after sundown and ensure emergency notifications are active on mobile devices.

Facility Closures: In the interest of public safety, Rockdale County Government offices, including the Courthouse and annexes, will be closed for the remainder of the week.

Important Contact Information and Information Resources:

- For non-emergency inquiries, please call the Rockdale EMA hotline:
- For poison-related concerns non-emergency, Georgia Poison Control has set up a special hotline: 404-856-6252.
- Air Quality Monitoring, visit epa.gov/current events
- GRN website for ongoing recommendations and updates:
<https://www.gnrhealth.com/biolab-chemical-fire-information/><https://dph.georgia.gov/smoke-biolab-chemical-fire>
- Rockdale County Website, www.rockdalecountyga.gov
- Rockdale County Facebook, www.facebook.com/RockdaleGov

We appreciate the community's continued cooperation and patience.

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ROCKDALE COUNTY PRESS RELEASE

**For Immediate Release
September 30, 2024**

Contact: Melisa Mims, Director
Department of Public Relations
(770) 278-7013

ROCKDALE COUNTY LIFTS SHELTER IN PLACE

ROCKDALE COUNTY, Ga. - Rockdale County Emergency Management Agency (EMA) is lifting the Shelter in Place recommendation and the evacuation zone for Rockdale County effective immediately. The latest readings from monitoring the last 24 hours via EPA (Environmental Protection Agency) with results showing Rockdale County with an average level of all readings at .09 well below the action level (.5) as of the last reading (September 30 at 4:59 pm).

Rockdale County Water Resources has tested the water, and it is deemed safe. The EPA will continue to monitor the air quality readings. Citizens can expect to continue to see clouds until its fully dissipated.

The Courthouse and all County Facilities, except Johnson Park, will reopen on Tuesday (October 1, 2024). Businesses in Rockdale County can proceed as normal.

Please continue to monitor Rockdale County's social media and website (www.rockdalecountyga.gov) for all updates, as this information is fluid.

For non-emergency situations, citizens can call the EMA Hotline at 770-278-8300. EMA will continue to monitor the incident and provide updates.

We appreciate the public's patience during this incident.



ROCKDALE COUNTY PRESS RELEASE

**For Immediate Release
September 30, 2024**

**Contact: Melisa Mims, Director
Department of Public Relations
(770) 278-7013**

ROCKDALE COUNTY REMAINS CLOSED WITH SHELTER IN PLACE CONTINUING

ROCKDALE COUNTY, Ga. – Rockdale County Emergency Management Agency (EMA), based on information received from the Environmental Protection Division (EPD) and the Environmental Protection Agency (EPA), strongly advises all Rockdale County residents to continue to shelter in place. Additionally, in the best interest and safety of the public and all citizens, it is recommended that businesses close operations until shelter-in-place is lifted.

This information is based on air quality surveys conducted by EPA and EPD, which revealed the harmful irritant chlorine, which was detected in the air emitting from the incident location of Bio Lab. For everyone sheltering in place, the best practice is to turn the air conditioning off and keep windows and doors shut.

On the Georgia Department of Transportation recommendation, Interstate 20 will remain closed eastbound and westbound from Turner Hill Rd to Almon Rd. The need to keep Interstate 20 closed is based on unpredictable path and wind direction, which could change the direction of the irritants in the air.

Please continue to monitor Rockdale County's social media and website (www.rockdalecountyga.gov) for all updates, as this information is fluid.

The public is asked to please NOT CALL 911 FOR NON-EMERGENCY situations. We are experiencing an overload of calls and need to keep lines open for critical emergencies only. For non-emergency situations, citizens can call the EMA Hotline at 770-278-8300 or the Rockdale County Sheriff's Office non-emergency line at 770-278-8200.

We appreciate the public's patience during this incident.

###

Press Releases

BioLab



FOR IMMEDIATE RELEASE

BioLab’s Dedicated 24/7 Call Center for Local Rockdale County Residents and Businesses to Open Today

Conyers, GA, October 8, 2024 – As part of its ongoing efforts to expand support services for the local community affected by the fire at its Conyers facility, BioLab will today open its dedicated round-the-clock call center for the Rockdale County community at 10:00 a.m. Eastern.

Starting today, local residents and businesses can call (678) 301-2359 to speak with a live representative, 24 hours per day, 7 days a week. The center will assist with evaluating and processing reimbursement requests from local residents and businesses as well as answering general questions.

“Our team at BioLab is committed to making things right for the residents and business community impacted by the fire at our warehouse,” said Michael Sload, CEO of BioLab’s parent company, KIK Consumer Products. “We recognize that members of our community have questions and concerns, and we want them to know that we hear them and are committed to being there for them. This call center is one of many resources we have underway to assist our community, based on our ongoing dialogue with residents, government officials, and other stakeholders. We will continue to do whatever it takes – for as long as it takes – to support our community.”

BioLab continues to work diligently as part of the Unified Command response team, bolstered by the support of the technical experts deployed by the company, to address the situation at its site. The company has continued to make progress, prioritizing at all times the health and safety of the community. Yesterday, on October 7, the [Rockdale County Emergency Management Agency](#) was able to announce the lifting of the shelter-in-place except for the two-mile radius around BioLab’s facility, reducing the number of those affected by the shelter-in-place. This recommendation was based on air monitoring data over the last five consecutive days.

Beyond the remediation efforts onsite, and in addition to the call center activated today, BioLab is also currently doing the following:

- **Offering Debris Clean-Up:** Understanding that there have been concerns among local residents about debris from the fire where wind has carried materials offsite, BioLab has been actively working since the onset of the situation to remove debris from public areas and roads. In addition, BioLab has activated a debris removal service for community members who wish to have fire debris cleared from their private property. Requests can be submitted to DebrisPickup@biolabinc.com.
- **Appointing a Community Liaison:** BioLab has appointed a local Community Liaison who is a highly experienced BioLab employee. The liaison is on the ground engaging with residents and local businesses to answer questions and understand how the company can best support its community.
- **Providing Local Community Assistance:** BioLab is working swiftly to open its in-person local Community Assistance Center, which will provide a central location for local residents and business owners to access information and resources coordinated by BioLab.
- **Supporting Local Organizations:** BioLab has made donations to Rockdale Emergency Fund and United Way to support their efforts to assist local residents, partnered with local

organizations to provide food to children who are remote learning, and is connecting with additional agencies to establish further partnerships.

Updates and resources will continue to be made available on BioLab's dedicated website:
www.BioLabCommunityResources.com.

Media Contact:

KekstBioLab@kekstcnc.com

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Press Releases

GEMA

Georgia Emergency

Management Agency



For Immediate Release:
October 2, 2024

News Release

State and Federal Agencies Continue Monitoring Rockdale County Biolab Fire Incident

(ATLANTA) – The Georgia Environmental Protection Division (EPD), the Georgia Department of Public Health (DPH), in coordination with the Georgia Emergency Management and Homeland Security Agency (GEMA/HS) and federal partners, continue to monitor air quality levels as weather patterns change throughout the Atlanta metro area through the week. continue to monitor air quality throughout the Atlanta metro area.

Overnight, monitoring around the Bio Lab facility detected some exceedances above the action level for chlorine. Workers on site have continued to make progress in neutralizing the product. As the neutralization process continues, periodic increases in chlorine levels around the facility are expected.

The EPA, Georgia EPD, and local officials are actively working to bring in additional resources to enhance monitoring capabilities around the site to ensure public safety remains a priority.

The current weather models show the winds will begin to shift from the east to the west after sunset Wednesday. Smoke is predicted to settle towards the ground as it moves toward Atlanta. There is a high likelihood that people across Metro Atlanta will wake up on Thursday morning seeing haze and smelling chlorine.

It is important to know that as the air settles each evening, smoke settles towards the ground as well. As the air lifts back up in the afternoon and evening, the smell and haze should dissipate. Chlorine has a very low odor threshold, meaning you can smell it before it reaches a harmful level.

Smoke that contains chlorine compounds can cause various symptoms including irritation of the eyes and airways, coughing, shortness of breath, difficulty breathing, chest tightness, a scratchy throat, irritated sinuses, headaches, stinging eyes, or a runny nose. People with heart disease might experience chest pain, palpitations, shortness of breath, or fatigue. People with lung disease may not be able to breathe as deeply or as vigorously as usual, and they may experience symptoms such as coughing, phlegm, chest discomfort, wheezing, and shortness of breath.

Limiting your exposure to the smoke and taking precautions to protect your health is important.

- Limit your activities outdoors and stay inside and away from the smoke.
- Keep indoor air as clean as possible. Keep windows and doors closed. Run your air conditioner only if you can close the fresh air intake and use re-circulated air.
- The elderly, children, and people with compromised immune systems should stay indoors or limit outdoor activities to prevent exposure to smoke.

www.gema.georgia.gov

- If you have asthma or another lung disease, follow the advice of your doctor or other health care providers about your respiratory management plan and medicines.

At this time, chlorine levels in the air sit at safe levels, however, out of an abundance of caution, continue to follow the advice of your local EMA's. However, if you experience symptoms like the ones mentioned above, please contact your health provider or the Georgia Poison Center at 404-856-6252.

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As part of the Office of the Governor, the Georgia Emergency Management and Homeland Security Agency collaborates with local, state and federal governments in partnership with private sector and non-governmental organizations to protect life and property against man-made and natural emergencies. GEMA/HS's *Ready Georgia* website and preparedness campaign provides Georgians with the knowledge needed to effectively prepare for disasters. Go to gema.georgia.gov/plan-prepare/ready-georgia for information on developing a custom emergency plan and Ready kit.

Chlorine and Health Related Handouts

This fact sheet answers the most frequently asked health questions (FAQs) about chlorine. For more information, call the CDC Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Chlorine gas is not usually detected in the environment. Exposure to chlorine can occur following an accident, such as a leak or spill from a chlorine tank or the improper use of swimming pool chemicals. Exposure to low levels of chlorine gas can result in nose, throat and eye irritation. Chlorine gas is too reactive to be detected in environmental media at hazardous waste sites. Any chlorine gas released at these sites would be quickly converted to other substances.

What is chlorine?

Chlorine is a gas with a very irritating odor. It is used in the production of thousands of products. It is also used for water disinfection, although the chlorine itself is quickly transformed into other chemicals at the beginning of the process.

A common misconception is that elemental chlorine (Cl₂) is present in chlorinated water. During water chlorination, elemental chlorine gas may be added to the water at first; however, the chlorine is quickly transformed into other chemicals, which actually disinfect the water. Hypochlorous acid and sodium hypochlorite are two of these chemicals that disinfect the water.

The term “free chlorine” in drinking water usually refers to the amount of hypochlorous acid and hypochlorite in the water. It is important to recognize that these compounds are different from molecular chlorine even though the terminology is often used interchangeably.

What happens to chlorine when it enters the environment?

- Chlorine is very unstable and reacts with a variety of chemicals and water when it is released into the environment.
- Chlorine is broken down by sunlight within a matter of several minutes.
- Chlorine dissolves in water and is converted into chloride and hypochlorous acid.

- If chlorine is spilled into water or onto soil or if it is released from a tank into the air, the chlorine will evaporate very quickly forming a greenish-yellow cloud that is heavier than air and can be carried by the wind several miles from the source.

How might I be exposed to chlorine?

- Because chlorine is so reactive, it is not normally detected in the environment except for very low levels in the air above seawater.
- You may be exposed through breathing, skin contact, and eye contact if an accident involving chlorine takes place nearby, such as a liquid chlorine spill, a leak from a chlorine tank, or a leak from a facility that produces or uses chlorine.
- You may also be exposed to chlorine if you mix household chemicals such as toilet cleaner with bleach. Mixing household cleaners containing ammonia with bleach may also release dangerous chemicals into the air.
- You may be exposed to chlorine gas through the improper use of swimming pool chemicals.
- People who work in places where chlorine is made or used may be exposed to low levels over a period of time.

How can chlorine affect my health?

Exposure to low levels of chlorine can result in nose, throat, and eye irritation. At higher levels, breathing chlorine gas may result in changes in breathing rate and coughing, and damage to the lungs.

Chlorine

CAS # 7782-50-5

In general, people who suffer from respiratory conditions such as allergies or hay fever, or who are heavy smokers, tend to experience more severe effects than healthy subjects or nonsmokers.

Drinking small amounts of hypochlorite solution (less than a cup) can produce irritation of the esophagus. Drinking concentrated hypochlorite solution can produce severe damage to the upper digestive tract and even death. These effects are most likely caused by the caustic nature of the hypochlorite solution and not from exposure to molecular chlorine.

Spilling hypochlorite solution on the skin can produce irritation. The severity of the effects depends on the concentration of sodium hypochlorite in the bleach.

How likely is chlorine to cause cancer?

The Department of Health and Human Services (DHHS) the International Agency for Research on Cancer (IARC), and the Environmental Protection Agency (EPA) have not classified chlorine as to its human carcinogenicity.

How can chlorine affect children?

Short-term exposures (minutes) to high concentrations of chlorine affect children in the same manner they affect adults, but children may be more sensitive. We do not know what the effects could be in children following longer-term, low-level exposure to chlorine gas or hypochlorite solution.

We do not know whether exposure to chlorine gas during pregnancy can result in damage to unborn babies because there are no studies of pregnant women or pregnant animals exposed to chlorine gas.

How can families reduce the risks of exposure to chlorine?

- Do not mix bleach with other household cleaners such as toilet cleaners because chlorine gas can be released to the air. Do not mix bleach with household cleaners containing ammonia because dangerous chemicals can be released to the air.

- Always store household chemicals in their original labeled containers out of reach of young children to prevent accidental poisonings. Never store household chemicals in containers children would find attractive to eat or drink from, such as old soda bottles.
- Chlorine gas can also be released to the air when chemicals used to chlorinate swimming pools are mishandled. If you have a swimming pool at home, read the labels of the chlorination products carefully and do not let children play with these products.

Is there a medical test to determine whether I've been exposed to chlorine?

There are no medical tests to determine whether you have been exposed specifically to chlorine.

Chlorine is transformed in the body into chloride ions, which are normal components of the body. An enormous amount of chlorine has to be inhaled or ingested in order to detect a significant increase in chloride ions in the blood.

Has the federal government made recommendations to protect human health?

EPA established an environmental air limit of 0.5 ppm. Exposure to higher levels could result in discomfort and irritation. Dependent on the concentration, these effects may be reversible when exposure ends.

OSHA set a legal limit of 1 ppm chlorine in air as a ceiling limit. At no time should a worker's exposure exceed this limit.

EPA established a maximum contaminant level (MCL) and maximum residual disinfectant level (MRDL) of 4 mg/L for free chlorine in drinking water.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2007. Toxicological Profile for Chlorine (Draft for Public Comment). Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information?

For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Human Health Sciences, 1600 Clifton Road NE, Mailstop F-57, Atlanta, GA 30329-4027.

Phone: 1-800-232-4636

ToxFAQs™ Internet address via WWW is <http://www.atsdr.cdc.gov/toxfaqs/index.asp>.

ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.



Smoke From BioLab Chemical Fire Health Precautions

A chemical fire at the BioLab facility in Conyers is sending heavy smoke into the air. The wind is pushing that smoke into areas beyond the immediate area of the fire. The Environmental Protection Agency (EPA) is monitoring air quality in real-time for chlorine and related compounds.

Smoke can irritate the eyes and airways, causing coughing, a scratchy throat, irritated sinuses, headaches, stinging eyes, or a runny nose. People with heart disease might experience chest pain, palpitations, shortness of breath, or fatigue. People with lung disease may not be able to breathe as deeply or as vigorously as usual, and they may experience symptoms such as coughing, phlegm, chest discomfort, wheezing, and shortness of breath.

Limiting your exposure to the smoke and taking precautions to protect your health is important.

- Stay inside and away from the smoke.
- Keep indoor air as clean as possible. Keep windows and doors closed. Run your air conditioner **only** if you can close the fresh air intake and use re-circulated air.
- If you have asthma or another lung disease, follow the advice of your doctor or other health care provider about your respiratory management plan and medicines.

If you experience symptoms like nose, throat, or eye irritation or have difficulty breathing, contact your healthcare provider or the Georgia Poison Center at 404-856-6252.



Georgia Poison Center

Irritant Gases Information for Healthcare Facilities

Causative Agent Chlorine and Chlorine Related Compounds

Hospital Precautions Standard precautions

Transmission Persons exposed only to chlorine gas or related compounds pose little risk of secondary contamination to others. However, clothing or skin soaked with solutions containing these products may be corrosive to rescuers and may secondarily release harmful

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Decontamination

Remove and double-bag contaminated clothing and personal belongings. Flush exposed skin and hair with plain water for 3 to 5 minutes. Wash thoroughly with soap and water. Handle frostbitten skin and eyes with caution. Place frostbitten skin in warm water, about 108°F (42°C). If warm water is not available wrap the affected part gently in blankets.

Mechanism

- Chlorine causes local tissue injury from the oxidation of functional groups in cell components, reactions with water to form hydrochloric acid, and the generation of free oxygen radicals.
- Chlorine and related compounds may irritate skin and mucous membranes, which include eyes, nasal passages, and respiratory system.

Routes

Inhalation is the primary route; also dermal, ocular, mucosal membranes, ingestion.

Symptoms/ Onset

- Immediate onset of symptoms are usually due to the irritant effects of chlorine and related compounds, however, respiratory symptoms may cause delayed up to 48 hours.
- Chlorine and related compounds can cause conjunctivitis, rhinitis, pharyngitis, lacrimation, burning sensation in the throat, mouth, nose, eyes, cough, shortness of breath, chest pain, nausea, vomiting, dizziness, and headache. Symptoms can progress to upper airway edema, laryngospasm, severe pulmonary edema, pneumonia, persistent hypoxemia, and respiratory failure. Exposure to liquefied chlorine can result in frostbite injury.
- People with preexisting conditions affecting these parts of the body may be more likely to develop symptoms from this exposure.

Treatment

There is no antidote. Supportive care is mainstay of treatment. Oxygen (humidified is preferred) therapy should be used in patients with dyspnea, wheezing, or pulse oximetry reading of SaO₂ of less than 94%. If bronchospasm and wheezing occur, consider bronchodilators (inhaled albuterol or other beta-agonists, and anticholinergics). Nebulized bicarbonate can be used in severe cases. Irrigate eyes with large volume of water or saline until ocular pH returns to normal. Chest x-ray if lower respiratory symptoms or high-risk exposure. Observe patients until resolutions of symptoms (typically 6-8 hours)

Prophylaxis

There is no known prophylaxis for exposure to irritant gases. N95 masks are likely to provide only limited benefit, if any, because the chlorine compounds are smaller than the size filtered by an N95 mask.

REFERENCES

ATSDR. 2018. Chlorine. Atlanta, GA: Agency for Toxic Substances and Disease Registry, U.S. Department of Health and Human Services, Public Health Service. <https://emergency.cdc.gov/agent/chlorine/index.asp>.
ATSDR. 2018. Phosgene. Atlanta, GA: Agency for Toxic Substances and Disease Registry, U.S. Department of Health and Human Services, Public Health Service. <https://emergency.cdc.gov/agent/phosgene/index.asp>.
Advanced Hazmat Life Support-Provider Manual. 4th ed. Arizona Board of Regents. Advanced Hazmat Life Support International Headquarters-Tuscan, Arizona. 2014.
Medical Management of Biological Casualties Handbook. 8th ed. U.S. Army Medical Research Institute of Infectious Diseases. Fort Detrick Frederick, Maryland. September 2014.



Irritant Gases

Information for Lay People

Causative
Chlorine and Chlorine **Agent**
Related Compounds

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Symptoms

Coughing, wheezing, difficulty breathing, increased irritation from exposed skin or eyes, chest pain may be expected. People with preexisting conditions affecting these parts of the body may be more likely to develop symptoms from this exposure.

Onset of Symptoms

Symptoms can start immediately or be delayed up to 24 hours.

How to Tell If You Have Been Exposed

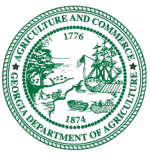
You may have been exposed if you have any of the above symptoms AND you were in the area where an irritant was released. Some people have reported smelling a chemical smell. Chlorine has a low odor threshold; smelling Chlorine does not mean symptoms will develop.

What to Do if You Believe You Have Been Exposed

Recommendations include limiting exposure to these compounds by staying indoors with closed windows and doors. Turn off HVAC that may pull in outdoor air. HVAC systems that are known to only recirculate indoor air can be left on in recirculate mode. Seek medical care as directed if you have severe symptoms (trouble breathing, chest pain).

General Information

- Most exposures to chlorine and related compounds occur from breathing the gas.
- Exposure to small amounts usually causes eye, nose, and throat irritation.
- People with preexisting conditions affecting these parts of the body may be more likely to develop symptoms from this exposure.



CHEMICAL EVENT GUIDANCE FOR THE AGRICULTURE COMMUNITY

The Georgia Department of Agriculture is closely monitoring the ongoing situation in Rockdale County and coordinating with Rockdale County EMA, the lead agency, GEMA/HS, EPD, DPH, DNR, Rockdale County, and many others. **The recommendations below are based on currently available information and are subject to change as further testing is conducted.** We urge you to exercise caution and take all necessary measures to keep yourself, your pets, and your livestock safe.



Rockdale County Emergency Hotline 770-278-8300

For agriculture related questions email chemicalevent@agr.georgia.gov.

PROTECT YOUR PETS/LIVESTOCK LIKE YOU PROTECT YOURSELF:

- If you are under a night-time shelter-in-place order, bring your pets inside at night and stable your horses under cover, if possible.
- Clean your pet thoroughly before bringing them inside, with a focus on paws.
- Morgan County Agricultural Center has space for impacted horses (call 706-342-2214).
- Contact your veterinarian immediately if you see respiratory distress or skin irritation symptoms.
- At this time, we do not know what the long term impacts may be - out of an abundance of caution, avoid grazing cattle or horses in pastures/fields where debris is present or has been present.
- The black debris reported by many citizens has been tested. It is roof blowoff from Styrofoam insulation – the material is inert. It can be treated as construction debris.
 - See local guidance for removal

ANIMAL FEED:

- Animal food that has been contaminated should be disposed of and not fed to animals.
- If you have grazing animals, it is recommended that they be given stored feed/hay as well as unexposed water. It is best to ensure food and water provided to your animals has not been exposed to fallen debris and potential contamination.

FOOD SAFETY:

- Unpackaged foods that are exposed to chemicals should be thrown away. This includes food stored at room temperature, such as fruits and vegetables, as well as foods stored in permeable containers like cardboard or plastic wrap.
- Canned goods and cookware exposed to chemicals can be decontaminated. Wash in a strong detergent solution. Then dip in a bleach solution (1 tablespoon of unscented, liquid chlorine bleach per gallon of water) for 15 minutes.

FOR BEEKEEPERS:

- Report any acute deaths from hives in the impact zone directly to chemicalevent@agr.georgia.gov.



GEORGIA DEPARTMENT OF AGRICULTURE
COMMISSIONER TYLER HARPER
AGR.GEORGIA.GOV

Resources:

- **Biolab Resource Information:**
 - 678-301-2359
 - www.biolabcommunityresources.com
 - Debris pickup? Requests can be submitted to DebrisPickup@biolabinc.com
- **For air quality data, please utilize the EPA website:**
www.epa.gov/ga/conyers-ga-biolab-fire.
- **Georgia Poison Center:** 404-856-6252

Videos:

- Rockdale Fire Chief Update at Biolab 9.30.24 -
<https://youtu.be/yPMFqOCTmLE?si=Pihrlx7CHnXhn1Ob>
- Press Conference 10/1/2024 :
https://youtu.be/l-zNOmXZOsw?si=-wvn4Fv_Ufxrz31D
- BioLab Update from Deputy Chief Robinson 10.3.24:
<https://vimeo.com/rockdalegov/biolabupdate>
- Piedmont Rockdale Doctor Update: <https://vimeo.com/101544417>