



CHLOREP & TRANSCAER

North American Emergency Response



CloroSur
2022

COSTA DO SAUÍPE



What is CHLOREP and How Does it Work?

What is CHLOREP?

- **The Chlorine Emergence Plan – established in 1972**
- **A 24/7 chlorine emergency response mutual aid network**
- **Supported by:**
 - 80 response teams from 22 member companies that produce, package, or use chlorine
 - 12 chlorine emergency response contractors that meet stringent industry performance requirements

CHLOREP The Chlorine
Emergency
Plan



CHLOREP Mission & Scope

Mission:

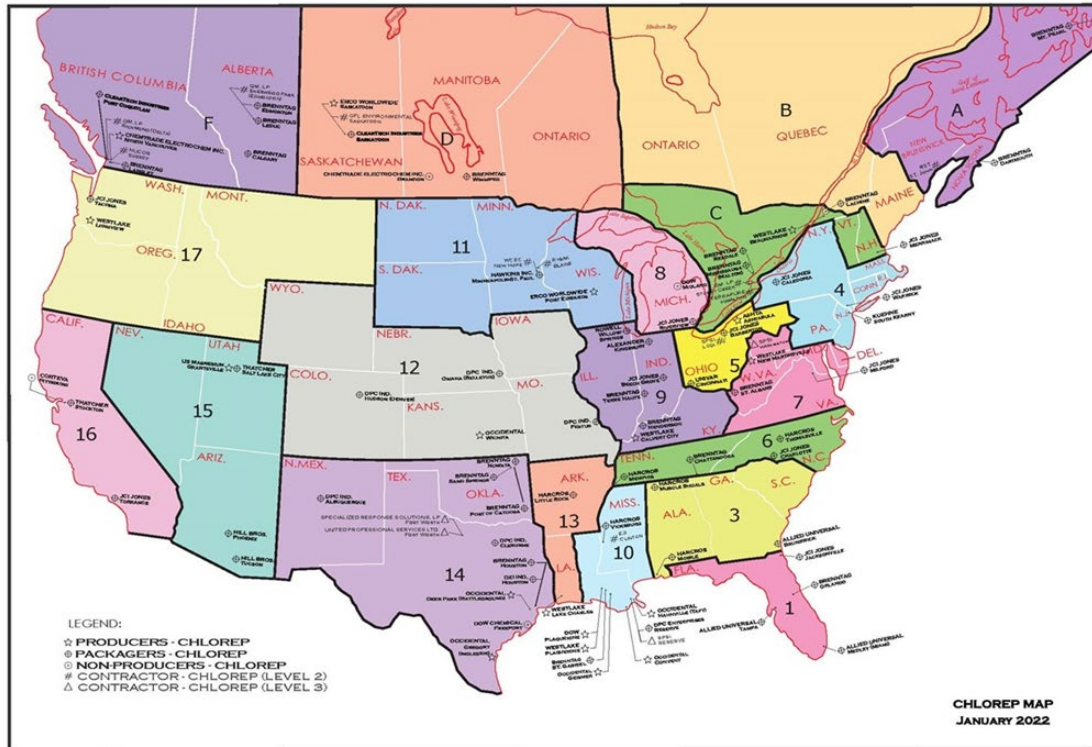
1. Prepare and educate participants to assure effective emergency response preparedness, prevention, and mitigation of chlorine incidents
2. Ensure timely and professional response to all chlorine incidents

Scope: Chlorine emergencies in transportation and at smaller end-user facilities

How Does CHLOREP Achieve Its Mission?

- **Provide complete CHLOREP coverage for the U.S. & Canada**
 - *Currently in the process of expanding into Mexico*
- **Implement & maintain a strong Emergency Response Contractor Verification Program**
 - *Supplement responses requiring more advanced capabilities or are located in remote areas*
- **Provide annual training for CHLOREP Teams & Contractors**
 - *Advanced training every three years for more experienced responders*
- **Support preparedness needs of state & local responders for chlorine emergency response through hands-on training**

How is CHLOREP Organized?



How is CHLOREP Organized?

- **CHLOREP Sectors**
 - *U.S. & Canada divided into 21 sectors*
 - *Majority of sector borders are state/provincial boundaries*
 - *CHLOREP Teams respond to emergencies within their sector, **regardless if they are the shipper/package owner or not***
- **CHLOREP Teams**
 - *Primary Teams*
 - *One response team in each sector receives initial call for assistance*
 - *Typically a chlorine producing plant*
 - *Secondary Teams*
 - *Provide additional support for response within the sector when called upon*
 - *Depending on location and containers involved*

How is CHLOREP Activated?

Primarily through 24/7 emergency call centers

In the U.S.
Call CHEMTREC
1-800-424-9300

Press #1 for all chlorine calls
Accepts international calls



In Canada
Call CANUTEC
1-888-226-8832



CHLOREP Activation - CHEMTREC

1. CHEMTREC receives emergency call

- *Collects details on chlorine incident*
- *Informs caller that CHLOREP assistance will be activated*

2. CHEMTREC dispatcher identifies CHLOREP sector and calls designated Primary CHLOREP Team

- *Emergency phone number and Team contact info provide by Chlorine Institute*
- *First call made, even before notifying the shipper*

3. Primary Team Leader immediately calls on-site emergency contact

- *Collect additional details on chlorine incident*
- *Determines appropriate response needs*

Primary CHLOREP Team Decisions

1. Provide technical advice over the phone, as needed

- *Are on-site fire responders or hazmat team capable of mitigating the release?*

2. Determine if emergency requires on-site assistance

- *Can the Primary Team dispatch for effective assistance in the timeliest manner?*
- *Is there a Secondary Team closer that can provide needed assistance?*
- *Is the emergency of a condition that requires assistance from a CHLOREP Contractor?*
- *Was the release already mitigated and the package needs picked up for disposal?*

CHLOREP Support

First Responders – First Line of Defense

- **Support preparedness needs of state & local responders for chlorine emergency response through hands-on training (*part of CHLOREP mission*)**



- *Provide hands-on chlorine emergency response training throughout North America*
- *Use CHLOREP Teams & Contractors for instruction*
- *Training rail tank car and flatbed railcar that houses training props*
- *Typically held at a rail partner yard*

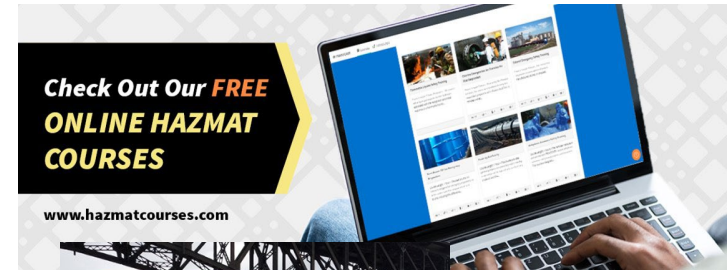
- **Conducted under TRANSCAER® program**

- *Transportation Community Awareness & Emergency Response*
- *Established in 1986 to assist communities in preparing for potential hazardous materials incidents*
- *Programs in U.S., Canada, and Mexico*



TRANSCAER in Action

- **First Responder Training**
 - Hands-On Training
 - Online Learning Management System
 - Online Videos
 - Augmented Reality Training (mobile app in process)
- **Supported by North American trade association sponsors (Chlorine Institute is a sponsor), member companies, corporate sponsors, and federal agency partners**
- **Multiple products, modes, and containers**
- **Significant financial support through federal emergency response grants (U.S. DOT)**
 - Federal Railroad Administration - \$977k support since 2010
 - Pipeline & Hazardous Materials Safety Administration - \$950k support since 2019



CHLOREP Contractors – Expert Support

- **Implement & maintain a strong Emergency Response Contractor Verification Program (*part of CHLOREP mission*)**
- **Ensures availability of adequate response capabilities by alternative methods outside the traditional CHLOREP network, particularly for remote or complex incidents**
- **Must be a Chlorine Institute member and meet certain capabilities and obligations**
- **U.S., Canada, and Mexico**
- **Verified to Level 2 or Level 3**
 - *Level 2 – site visit every two years*
 - *Level 3 – site visit every four years*



CHLOREP Contractors – Capabilities

Primary response capability differences:

Level 2	<ul style="list-style-type: none">• Small container leaks (cylinders & ton containers)• Minor release from tank car valve or pressure relief device• Mitigate with chlorine emergency A, B, or C-Kit
Level 3	<ul style="list-style-type: none">• Level 2 capabilities, plus:• Special handling & field transfer capabilities for severely or potentially damaged bulk containers (cargo tanks & tank cars), which have the potential for high impact consequence to public/environment (chlorine, VCM, and anhydrous HCl)

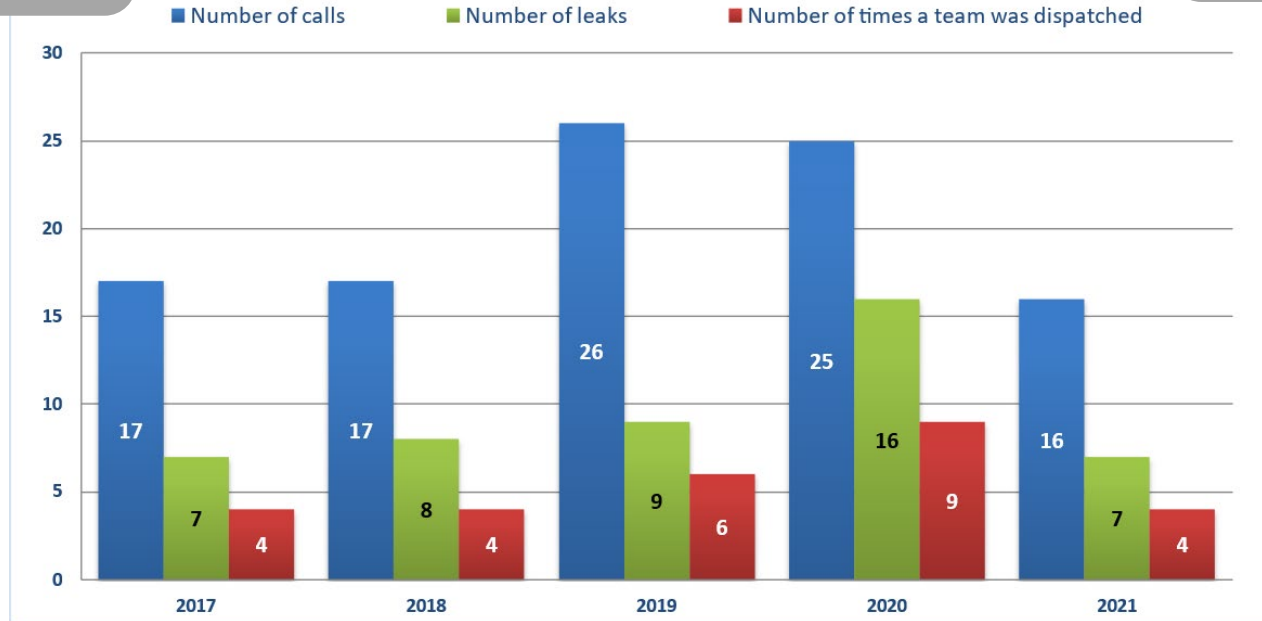
CHLOREP Activation Data (2017-2021)

Total CHLOREP Activation Calls

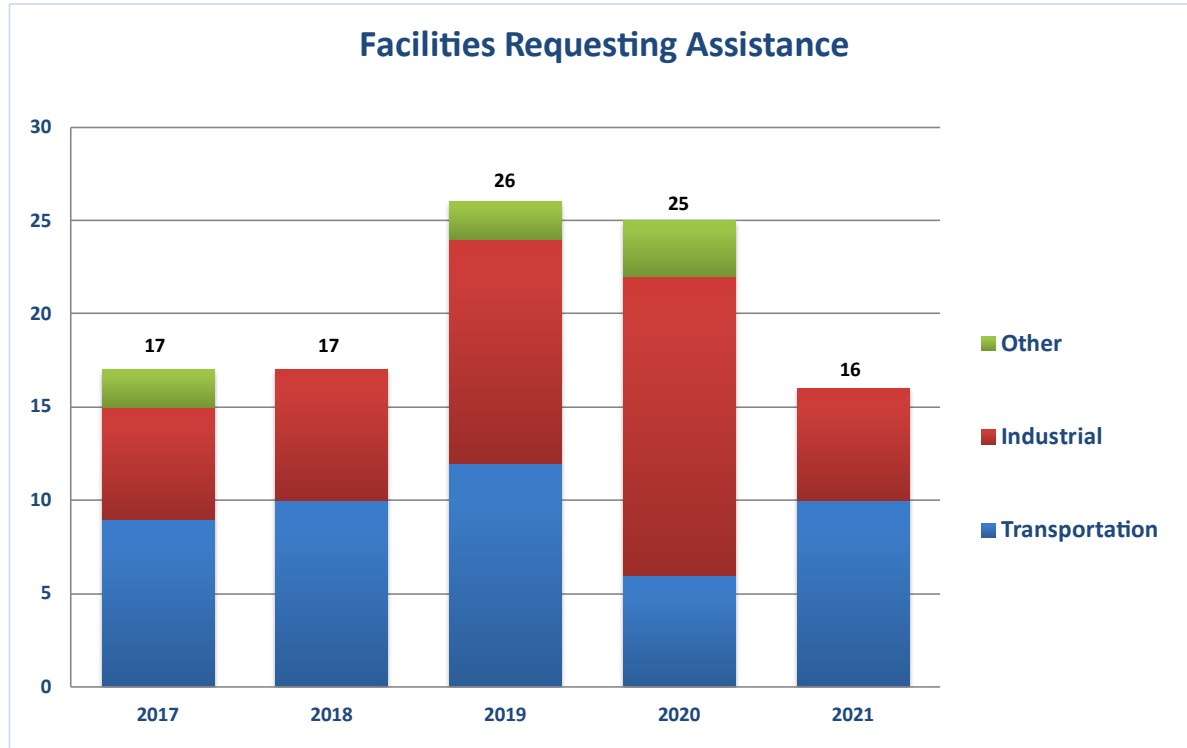
48 out of 101
(48%) of the calls
reported a leak

27 out of 101 (27%) of the
calls required a CHLOREP
team being dispatched

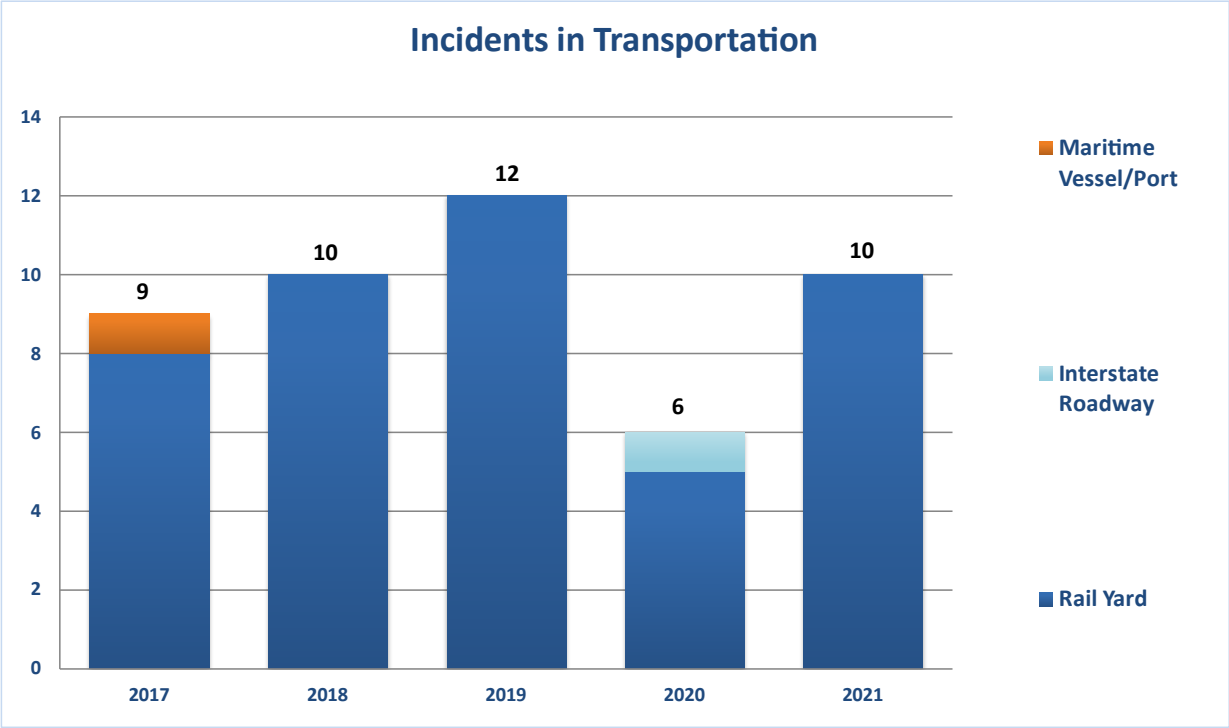
CHLOREP Activation Calls



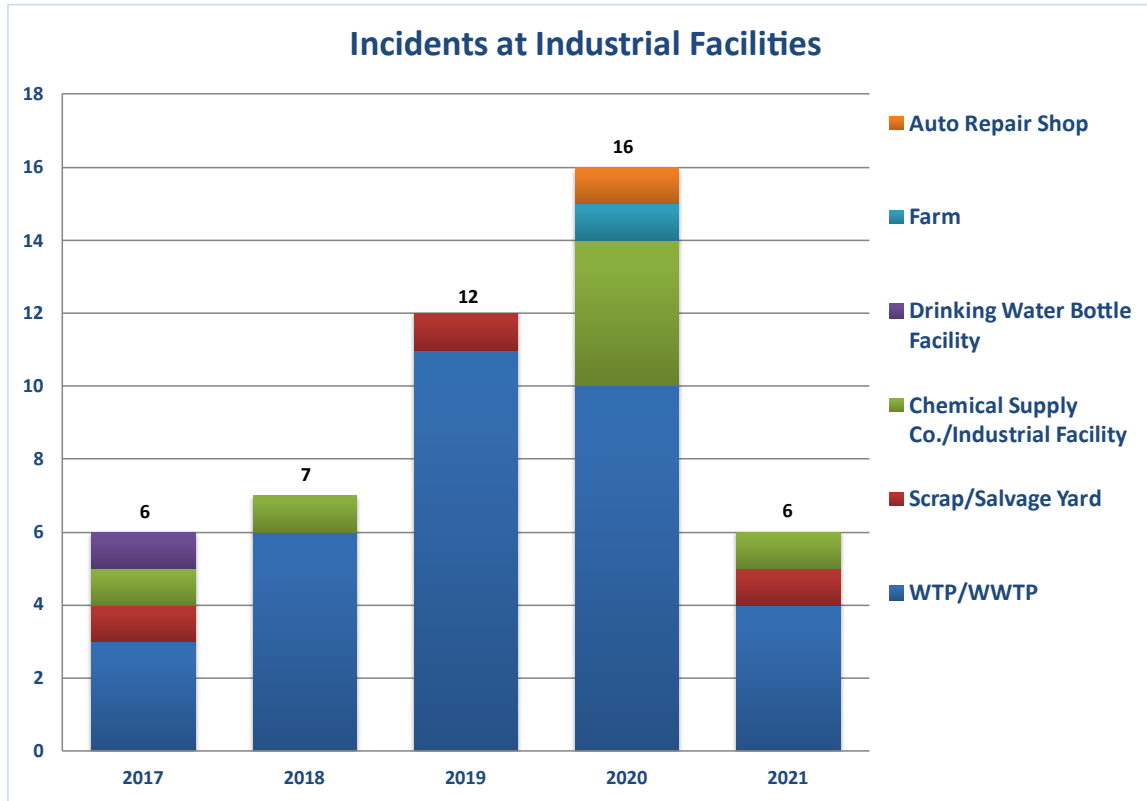
Facilities Requesting Assistance



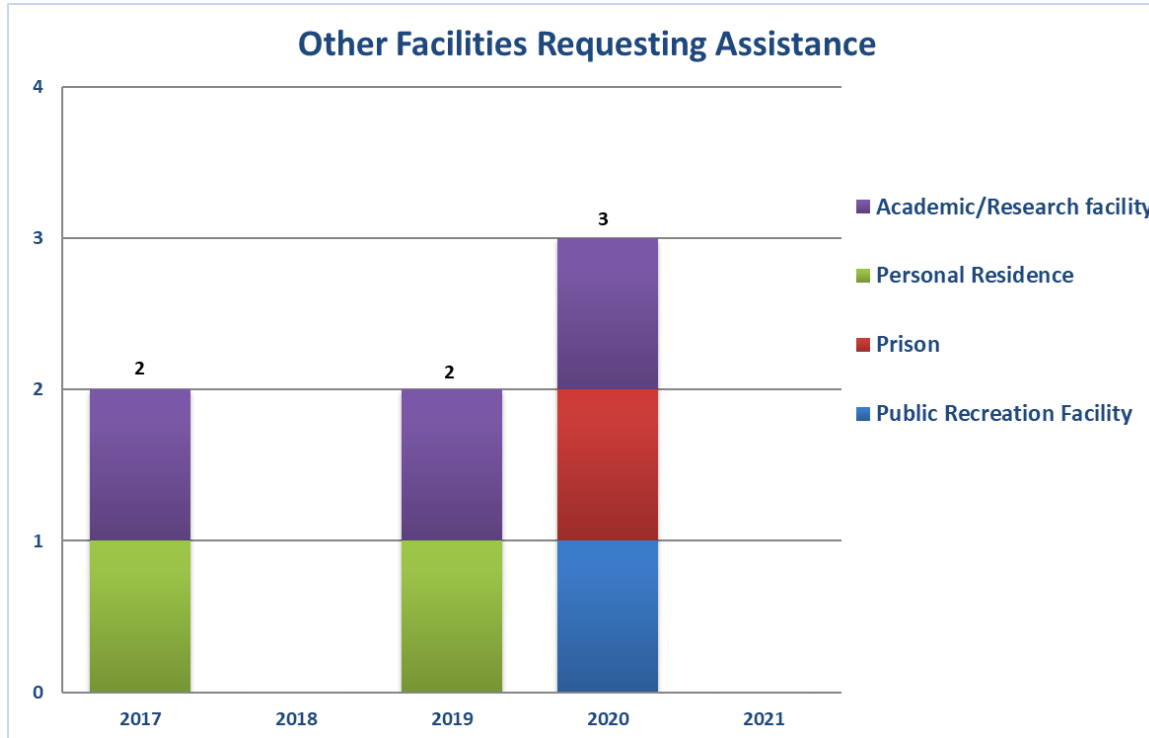
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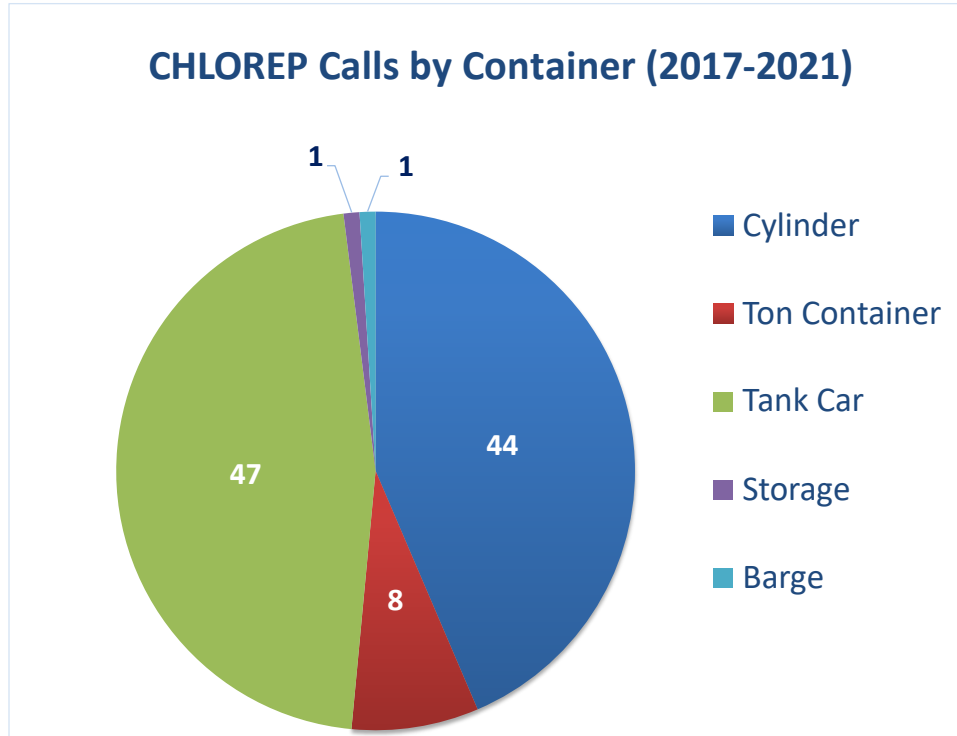
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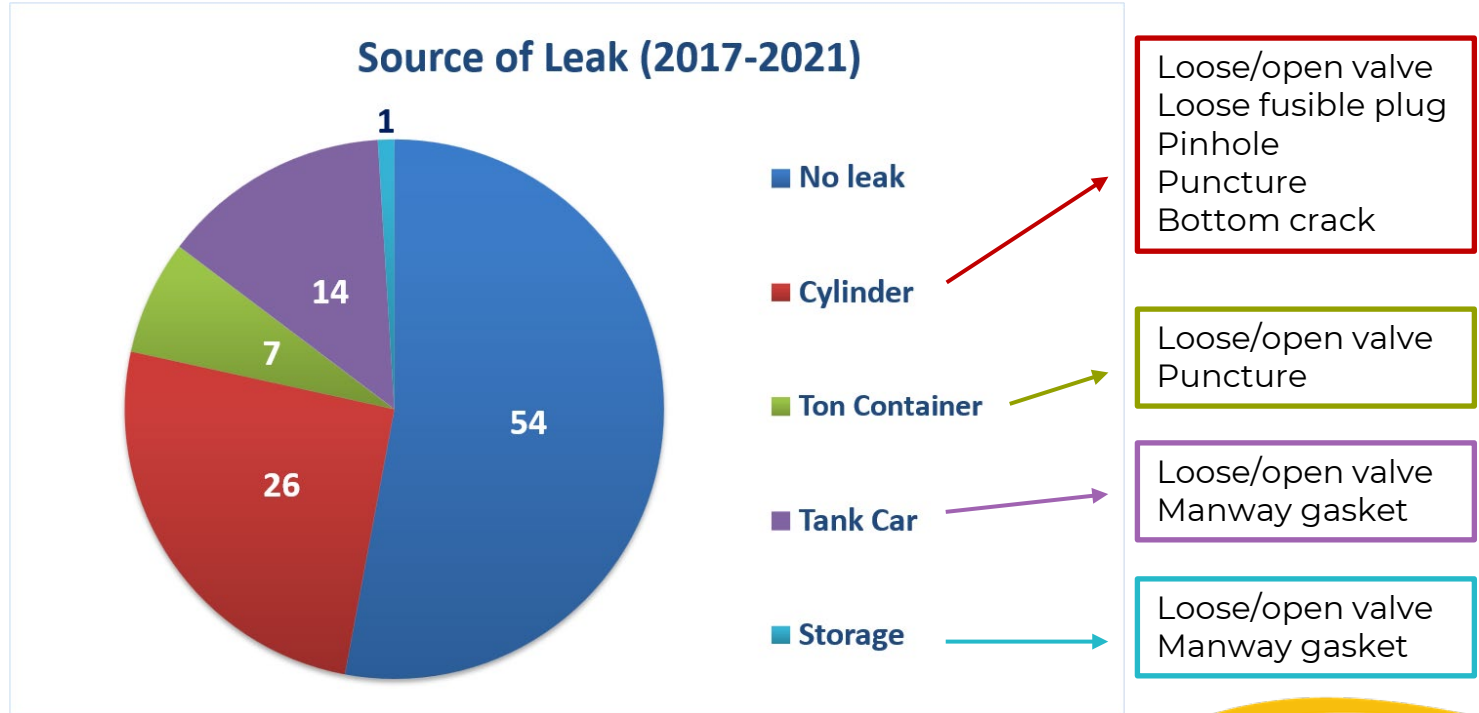


Calls by Container



Leaks by Container Type

48 out of 101
(48%) of the calls
reported a leak



Loose/open valve
Loose fusible plug
Pinhole
Puncture
Bottom crack

Loose/open valve
Puncture

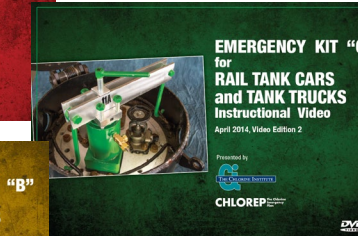
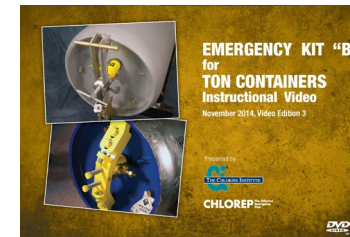
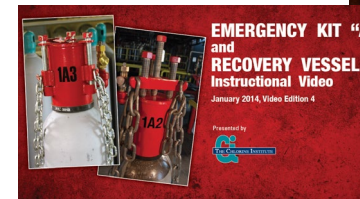
Loose/open valve
Manway gasket

Loose/open valve
Manway gasket

CI Emergency Response Resources

CI Emergency Response Resources

- **Publications available for download and streaming for *FREE* to first responders (email bookstore@CL2.com to request)**
 - Chlorine emergency kit instruction booklets
 - Chlorine emergency kit instruction video
 - *Chlorine Emergencies: An Overview for First Responders* (video)
 - Other safety publications and videos
- **Additional resources can be found on CI's website:**
www.chlorineinstitute.org
- **Non-emergency technical services email:**
techsvc@CL2.com



A tropical landscape featuring a body of water in the foreground, a line of palm trees on a grassy bank in the middle ground, and a blue sky with scattered white clouds. A large, light yellow diagonal shape is overlaid on the image, containing the text.

Thank You!

Robyn Kinsley

Vice President, Transportation & Emergency Preparedness

The Chlorine Institute

rkinsley@CL2.com

