

ARE YOU IN THE "LINE OF FIRE?"

Case for Change



SETTING THE STANDARD IN OIL AND GAS SAFETY

ENERGY
SAFETY
CANADA



WHAT IS LINE OF FIRE?

You are in the line of fire when you are at risk of coming into contact with a force your body cannot endure.

Line of fire is broken into three mechanisms of injury:



Stored Energy

Contact with stored energy
Includes pressure releases



Striking Hazards

Struck by or striking against an object
Includes dropped objects



Crushing Hazards

Caught in, on or between an object
Includes hand injuries



CURRENT STATUS?

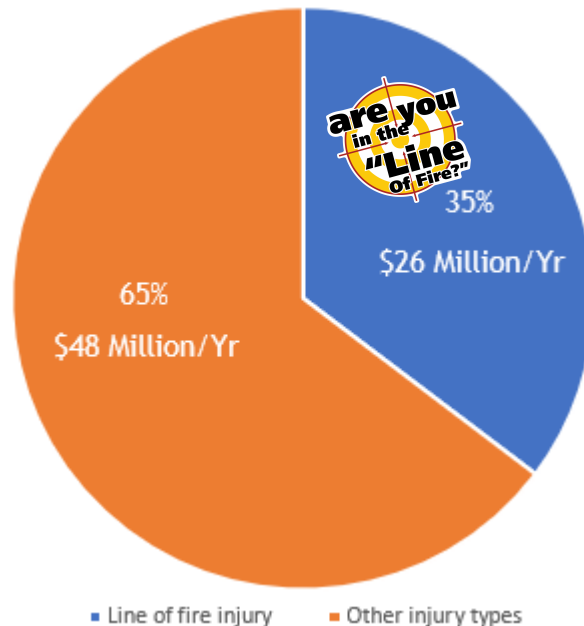
Creating a company-wide line of fire program presents a significant opportunity for injury prevention.

- Line of fire hazards, and the opportunity to correct them, are often overlooked.
- Line of fire-related injuries are common and can lead to serious injury.
- The line of fire program is aligned with Life Saving Rules and includes unsafe conditions as well.
- Line of fire hazards exist year-round (not a seasonal trend).



HOW SIGNIFICANT IS LINE OF FIRE?

Line of fire injury costs account for approximately 1/3 of all claim costs in the three western provinces with an annual cost of approximately \$26 M. This is 8,514 people over the last five years that have been hurt.



8,514
People



*All Oil and Gas Funding Codes Western Provinces - 2014 to Q1 2019; includes injuries such as some fires and explosions, struck by vehicle, struck by objects, pressure releases, exposures to hazardous energy, caught in or crushed.



WHAT DOES OUR INCIDENT DATA INDICATE?

[Add your incident data and trends here:]



ALIGNMENT WITH LIFE SAVING RULES

The line of fire program is aligned with Energy Safety Canada's 10 Life Saving Rules, which focus on safe behaviours, however it can also stand alone.

The program also includes aspects relating to unsafe conditions and unsafe acts.





ENERGY SAFETY CANADA'S 10 LIFE SAVING RULES



CONFINED SPACE



WORKING AT HEIGHT



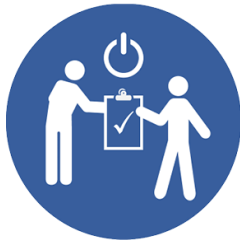
WORK AUTHORIZATION



ENERGY ISOLATION



LINE OF FIRE



BYPASSING SAFETY CONTROLS



DRIVING



HOT WORK



SAFE MECHANICAL LIFTING



FIT FOR DUTY

NOTE: Nine rules were adopted from the International Association of Oil & Gas Producers (IOGP) with Fit for Duty being added to reflect the Canadian environment





LINE OF FIRE - LIFE SAVING RULE

The Line of Fire Life Saving Rule has a large focus on body positioning.

Keep yourself and others out of the line of fire

- I position myself to avoid:
 - Moving objects
 - Vehicles
 - Pressure releases
 - Dropped objects
- I establish and obey barriers and exclusion zones
- I take action to secure loose objects and report potential dropped objects





Jordan Roppel

Jordan Roppel was 18 and had less than two months on the job at a perforating shaped charge manufacturing plant in Standard, Alberta. Jordan was a vintage muscle car enthusiast and had plans to become an auto mechanic when he finished high school.

Jordan's forklift became stuck in mud. A chain and sling was attached by site personnel to the ball of a pickup truck's hitch while the other end was secured to the forklift. Jordan remained in the forklift while others took several runs with the truck to free the forklift. On the final pull, the explosive force of the shock load snapped the hitch ball off and sent it flying at Jordan. Jordan was struck on the head and died at the scene.



Line of Fire

The line of fire rule is designed to keep yourself and others out of the line of fire of moving objects like flying ball hitches.



PROPOSED GOAL

To reduce line of fire-related incidents company-wide, by **20%** per year.

This translates to [Insert company # here] fewer people being hurt.

The proposed program aligns strategically:

- Supporting the company core values, including increased commitment to safety, respect, raising the bar, honouring commitments and doing the right thing.
- Continue to advance our journey to zero injuries and zero incidents.
- Continue to advance a strong safety culture through:
 - Working collaboratively to understand and manage line of fire risks
 - Building capacity in our people and systems to manage line of fire



ARE YOU IN THE "LINE OF FIRE?" PROGRAM



Step 1:

- Leadership alignment
- Level of effort
- Resourcing
- Budget
- Implementation

Next steps:

- Flexible focused program
- Activity packages
- Company webpage and social media



STEP 1: LEADERSHIP ALIGNMENT

Leadership Engagement

- H&S works with leadership to assist with appropriate level of effort recommendation for their specific areas.
- Functional area leadership team meetings

Functional Area Level of Effort Identification

- Review draft level of effort and agree on upcoming years program

Functional Area Resource Allocation

- Identify functional area sponsor and communicate expectations.
- Identify functional area leaders.
- Scheduled H&S to conduct orientation in partnership with the functional area leaders, sponsor(s), and/or champions.

Material Ordered

- Identify material needs and order (<https://escsafety.devcogroup.com/>)
- Distribute materials



NEXT STEPS: FOCUSED PROGRAM

Activity Packages

- Functional area leaders use activity packages to help roll out the program.
- Packages include Toolbox Talks, Inspections, Forms, etc.

Communications

- H&S rolls out program on existing employee communication channels (i.e. internal website)
- Communications include: company website, social media (Twitter, Facebook etc.)



INITIAL QUESTIONS FOR LEADERSHIP

Consider:

- Do you want to participate?
- To what degree?
- Who will be the sponsor and the supporting leaders?



PROGRAM IMPLEMENTATION: FUNCTIONAL AREA BREAKDOWN

Line of Fire Program Components	Smaller Location	Larger Location	Our Location
Case for change	? hour(s)	? hour(s)	? hour(s)
Posters and tent cards	? hour(s)	? hour(s)	? hour(s)
Activity package delivery	? hour(s)	? hour(s)	? hour(s)
Activity package issue follow-up and Resolution	? hour(s)	? hour(s)	? hour(s)
Hazard hunts	? hour(s)	? hour(s)	? hour(s)
Hazard signage	? hour(s)	? hour(s)	? hour(s)
Inspections	? hour(s)	? hour(s)	? hour(s)
Total Hours	? hour(s)	? hour(s)	? hour(s)



LEADERSHIP ENGAGEMENT

Time Line		
1.	Meeting with ESC	Date TBD
2.	Case for change presentation	Date TBD
3.	H&S check-in	Date TBD
4.	Functional area leadership team presentation	Date TBD
5.	Program final review & sign off by key H&S leaders	Date TBD
6.	Program implementation	Date TBD



PLANNING, DESIGN AND RELEASE

Time Line

1.	Development of project execution plan	Date TBD
2.	Secure resources	Date TBD
3.	Informal lessons learned	Date TBD
4.	Project development work	Date TBD
5.	Minor tweaks and/or final deliverables	Date TBD
6.	Awareness training for H&S	Date TBD
7.	Program final review and sign off by functional area leaders	Date TBD
8.	Monitor and support roll out	Date TBD



OPTIMUM PROGRAM ROLLOUT SCHEDULE

Time Line		
1.	Leadership engagement <ul style="list-style-type: none">- Identify level of effort- Identify resources- Order materials	Date TBD
2.	Awareness training for H&S, Comms and key stakeholders	Date TBD
3.	Program implementation	Date TBD
4.	Activity package 1	Date TBD
5.	Activity package 2	Date TBD
6.	Activity package 3	Date TBD



ROLES AND RESPONSIBILITIES OVERVIEW

H&S Team	Functional Area H&S Team	Functional Area Leadership Team and Sponsor	Functional Area Leaders
<ul style="list-style-type: none"> Ensure the Line of Fire program is maintained and improved yearly based on post-event lessons learned. Act as a subject matter expert to support the functional area H&S team. Provides a sample “starter kit” of materials to all functional area participating. Hosts the campaign page on the company website and social media. Co-host an orientation session in partnership with the functional area sponsor/s, H&S, communications specialist(s). Work with functional areas to provide ongoing statistics and lessons learned. Provide feedback on the program to Energy Safety Canada. 	<ul style="list-style-type: none"> Review last year’s lessons learned and identify opportunities for improvement. Conduct a review to draft upcoming years level of effort proposal. Act as a local subject matter expert to support the functional area champions. Provide program direction and works closely with functional area champion to prepare them to run the program. Plan and schedule orientation session in partnership with the H&S team. Provides ongoing statistical analysis of workplace injuries. Provide feedback on the program to H&S team. 	<ul style="list-style-type: none"> Review the draft level of effort and agree on upcoming years program. Leadership team identifies functional area sponsor and communicates expectations. Leadership team identifies functional area champion(s) and communicates expectations. Provide ongoing stewardship of resource utilization, program success and challenges, associated work orders and/or corrective actions. Work with H&S team to plan and schedule an orientation session in partnership with the H&S team. Identify tactical material needs. 	<ul style="list-style-type: none"> Lead roll out within their specific area. Work with the function area sponsor to escalate issues or highlight opportunities. Provide regular feedback to the functional area sponsor on progress. Customize supporting campaign material Work with the functional area team to act as an area subject matter expert. Provide ongoing feedback on the program to functional area H&S team.