

2018

LIFE SAVING RULES

Case for Change

SETTING THE STANDARD IN OIL AND GAS SAFETY

ENERGY
SAFETY
CANADA

SUMMARY

- A common set of Life Saving Rules establishes a consistent approach in the prevention of serious injuries and fatalities, which enables the standardization of a common safety orientation
- The new rules are clear and concise and have the potential to save lives and reduce inefficiencies
- The Safety Standards Council, a key component of Energy Safety Canada's governance mandate, was established with executive representation from companies of varying sizes across industry sectors
- Safety Standards Council has agreed to collaborate to set standards and support their adoption, creating a critical mass to lead the way for industry
- This presentation covers:
 1. Standardization
 2. Energy Safety Canada's 10 Life Savings Rules
 3. Facility Data
 4. Data for Change
 5. Learning from Tragedy
 6. Summary

LIFE SAVING RULES - STANDARDIZATION

- An opportunity exists to standardize Life Saving Rules, which will:
 - Reduce rule confusion and deliver better safety outcomes
 - Enable the standardization of a Common Safety Orientation to reduce redundancy
- Majority of companies are already using some form of Life Saving Rules. Top seven rules already in use within industry:
 1. Energy Isolation
 2. Working at Height
 3. Confined Space
 4. Work Authorization
 5. Driving
 6. No Alcohol or Drugs
 7. Safe Mechanical Lifting
- Even when companies are using the same rule by name, the icon or details of the rule are often different



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



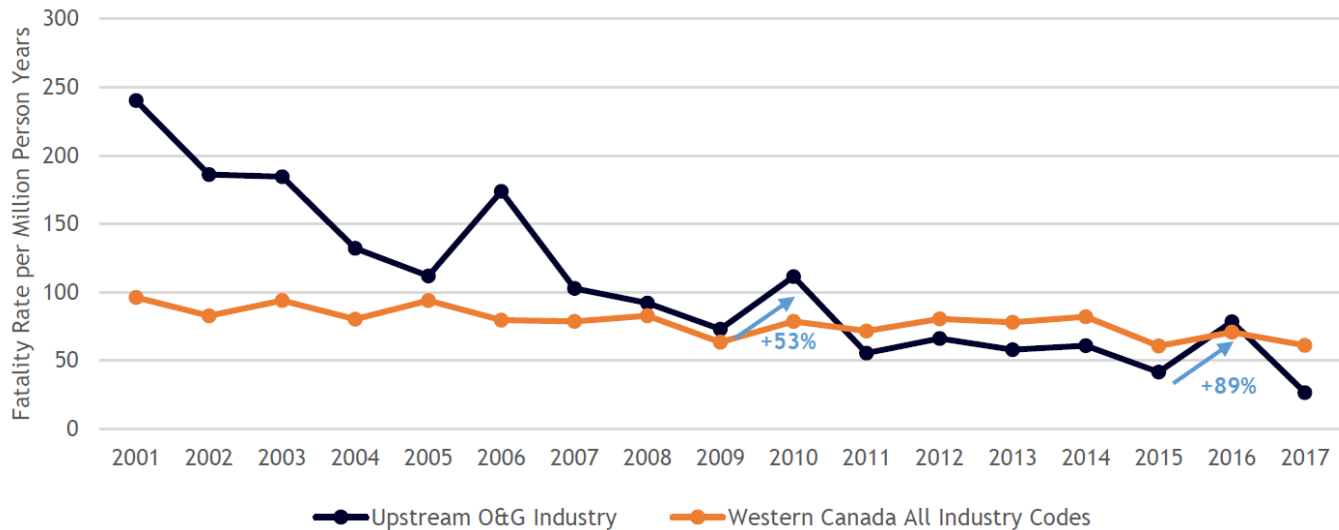
FIT FOR DUTY

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

FATALITY RATE TREND

The fatality rate has declined significantly over the years in the oil and gas industry dropping below the Western Canadian average in 2011

Fig 1: Occupational Fatality Rate Trend



WCB Data (2001-2017, Oil and Gas Funding Codes, Western Provinces)

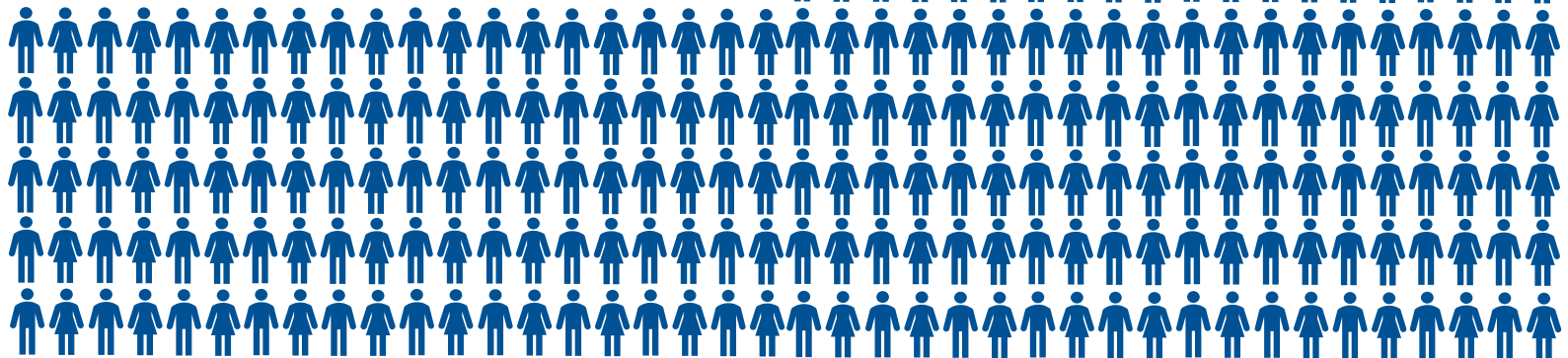


FATALITY NUMBERS

There have been over 300 fatalities in the last 17 years within the oil and gas funding codes – that is 20 fatalities per year on average

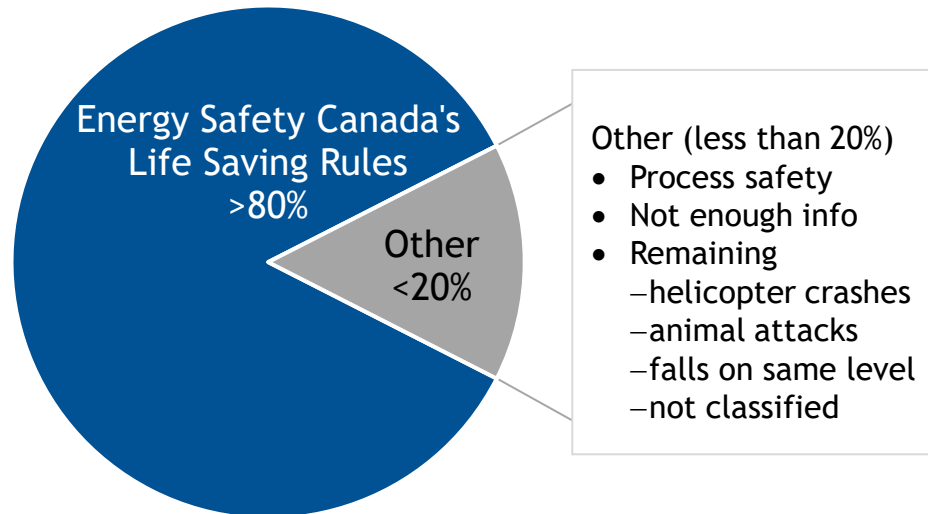
300+

Number of fatalities from 2001-2017 within WCB's O&G Funding Codes



DATA FOR CHANGE

- Energy Safety Canada's 10 Life Saving Rules provide an estimated coverage of greater than 80% of the 300+ fatalities
- The average WCB cost of a fatality is \$230,000 with an estimated company cost of at least \$1,000,000* and a much larger societal cost



This means over

16 LIVES
per year

may have been saved

WCB Data for Fatalities in AB, BC, SK from 2001 to 2017
(Oil and Gas Funding Codes, Western Provinces, includes 6600 Code)

*IRSST: <http://www.irsst.qc.ca/media/documents/PubIRSST/R-774.pdf?v=2018-01-24>

LEARNING FROM TRAGEDY

- Each of the 300+ individuals that lost their lives has their own story
- Three stories of tragedy have been graciously shared by families of lost loved ones
- Each of these tragedies may have been prevented if a Life Saving Rule was followed



Blaine Nittel

Blaine was 23 years old and spent a lot of his spare time helping his dad, Bruce. We bought a new calf table in the spring of 2012 and he helped Bruce place it in the branding pen. Blaine planned to be the fourth generation on our family farm or, as Blaine liked to call it—The Ranch.

- Memories of Wendy-Ellen Nittel

Blaine was moving a service rig along a treacherous highway with minimal shoulder and very steep ditches. Somehow, on this busy road where truckers and school buses compete for space, Blaine's truck veered off toward the ditch. He tried to correct and come out, but the pump truck rolled and Blaine was crushed. His co-workers desperately tried to rescue their colleague, but there was nothing that could be done to save him. Why Blaine's truck veered into the ditch is not known.



Driving

The driving rule focuses on journey management, avoiding distractions and ensuring that you are fit, rested and fully alert.



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.



Dustin Cadrain

Dustin loved the oilfield and started working on the rigs at age 16. He was very loyal to his family, friends and employers. Dustin had a passion for public speaking and story telling, especially cowboy poetry where his deep booming baritone voice would garner the attention of a crowd.

Dustin was a seasoned labourer on a pipeline project. As he had been taught to do, he stepped in between the side boom and pipe to attach the “rolli pipe cradle”. The boom suddenly fell, pinning Dustin between the boom and the pipe. Despite the heroic actions of site personnel, Dustin died on scene. The boom line had slipped through cable clamps that were the wrong size and had only been hand tightened. On the day of his death, no one had inspected the boom line.



Safe Mechanical Lifting

The safe mechanical lifting rule requires that the equipment and load are inspected and fit for purpose. This rule also requires that exclusion zones are established and obeyed.

SUMMARY

- The Life Saving Rules are an integral component to our shared vision of zero injuries, zero incidents
- Standardization of Life Saving Rules will reduce rule confusion and deliver better safety outcomes
- We need your support and leadership in driving change in your company and throughout industry

DISCUSSION AND QUESTIONS