LIFE SAVING RULES BACKGROUNDER

Background

Standardization is part of Energy Safety Canada's strategy to improve safety outcomes and reduce inefficiencies. The Safety Standards Council, a key component of Energy Safety Canada's governance mandate, was established with executive representatives from companies of varying sizes across industry sectors. The Safety Standards Council has agreed to collaborate to set standards and adopt them in their companies, creating a unified approach to lead the way for industry.

Opportunity

Many companies have health and safety rules designed to save lives. However, these rules are not consistent from company to company. An opportunity exists to standardize Life Saving Rules (LSRs), which will reduce rule confusion and deliver better safety outcomes.

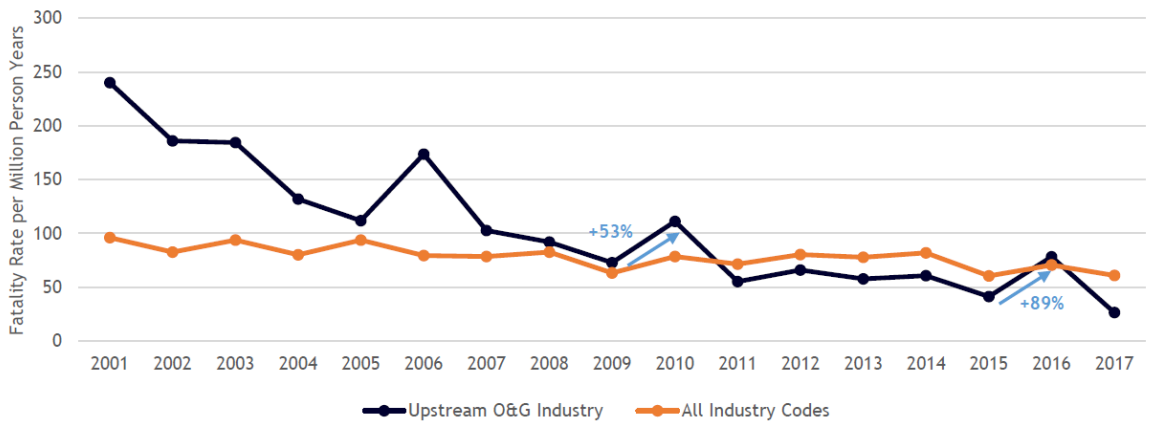
Having a single set of LSRs also enables the introduction of a Common Safety Orientation (CSO) for industry. The aim of a CSO is to reduce duplicate training, increase seamless movement of workers between sites and cut unnecessary cost.

Process for Selecting the LSRs

Based on the Workers' Compensation Board (WCB) codes for the oil and gas industry (including the oil sands 6600 code), more than 300 fatalities occurred between 2001 and 2017.

This is, an average of 20 fatalities per year at an average WCB cost of $230,000 and an estimated company cost of $1,000,000[1]. Despite more recent industry efforts, improvements in the prevention of health and safety incidents have not translated to the elimination of serious injuries and fatalities (see Fig. 1).

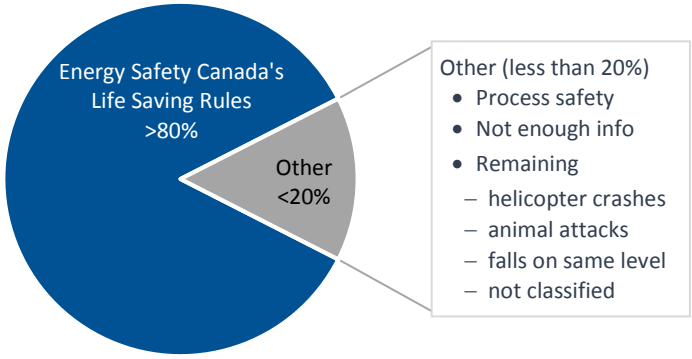
Fig 1: Occupational Fatality Rate Trend



[1] IRSST (Institut de recherche Robert-Sauvé en santé et sécurité du travail): http://www.irsst.qc.ca/media/documents/PubIRSST/R-774.pdf?v=2018-01-24

A key step in selecting and defining the LSRs was to align them with the WCB's fatality categories to ensure the rules address the classifications/causes of fatalities. An overview of Energy Safety Canada's 10 Life Saving Rules is attached. Had Energy Safety Canada's Life Saving Rules* been implemented and followed in every case, more than an estimated 80% of those deaths could have been prevented (see Fig. 2).

Fig. 2: Alignment of Energy Safety Canada's LSRs with WCB Fatality Categories



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

*Nine of Energy Safety Canada's LSRs are adopted from the International Association of Oil and Gas Producers (IOGP) with the addition of Fit for Duty added to reflect the Canadian oil and gas industry.

Next Steps

Life Saving Rules will be released in early October 2018 and Energy Safety Canada will provide ongoing support to industry in the adoption of these rules. Resources and additional information will be available at EnergySafetyCanada.com.

ATTACHMENTS:
Life Saving Rules Overview

ENERGY SAFETY CANADA

SETTING THE STANDARD IN OIL AND GAS SAFETY

LIFE SAVING RULES

AN INDUSTRY ACCEPTED STANDARD

CONFINED SPACE

WORKING AT HEIGHT

WORK AUTHORIZATION

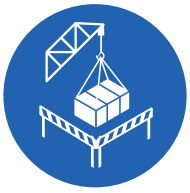
ENERGY ISOLATION

LINE OF FIRE

BYPASSING SAFETY CONTROLS

DRIVING

HOT WORK



SAFE MECHANICAL LIFTING

FIT FOR DUTY

LIFE SAVING RULES

CONFINED SPACE

Obtain authorization before entering a confined space

- I confirm energy sources are isolated
- I confirm the atmosphere has been tested and is monitored
- I check and use my breathing apparatus when required
- I confirm there is an attendant standing by
- I confirm a rescue plan is in place
- I obtain authorization to enter

WORKING AT HEIGHT

Protect yourself against a fall when working at height

- I inspect my fall protection equipment before use
- I secure tools and work materials to prevent dropped objects
- I tie off 100% to approved anchor points while outside a protected area

WORK AUTHORIZATION

Work with a valid permit when required

- I have confirmed if a permit is required
- I am authorized to perform the work
- I understand the permit
- I have confirmed that hazards are controlled and it is safe to start
- I stop and reassess if conditions change

ENERGY ISOLATION

Verify isolation and zero energy before work begins

- I have identified all energy sources
- I confirm that hazardous energy sources have been isolated, locked, and tagged
- I have checked there is zero energy and tested for residual or stored energy

LINE OF FIRE

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

BYPASSING SAFETY CONTROLS

Obtain authorization before overriding or disabling safety controls

- I understand and use safety-critical equipment and procedures which apply to my task
- I obtain authorization before:
  - Disabling or overriding safety equipment
  - Deviating from procedures
  - Crossing a barrier

DRIVING

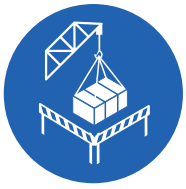
Follow safe driving rules

- I always wear a seatbelt
- I do not exceed the speed limit, and reduce my speed for road conditions
- I do not use phones or operate devices while driving
- I am fit, rested and fully alert while driving
- I follow journey management requirements

HOT WORK

Control flammables and ignition sources

- I identify and control ignition sources
- Before starting any hot work:
  - I confirm flammable material has been removed or isolated
  - I obtain authorization
- Before starting hot work in a hazardous area I confirm:
  - A gas test has been completed
  - Gas will be monitored continually



SAFE MECHANICAL LIFTING

Plan lifting operations and control the area

- I confirm that the equipment and load have been inspected and are fit for purpose
- I only operate equipment that I am qualified to use
- I establish and obey barriers and exclusion zones
- I never walk under a suspended load

FIT FOR DUTY

Be in a state to perform work safely

- I will be physically and mentally in a state to perform my assigned duties
- I commit to not being under the influence of alcohol or drugs
- I will inform a supervisor immediately if I or a co-worker may be unfit for work