ENGINEERING
INFORMATION
SPECIALISTS

SAFETY
Records Retention & Document Management

KINSMEN GROUP
1. Always watch your children when they’re in or near a pool or spa.

2. Teach children how to swim.


4. Ensure children wear a PFD if they are not able swim yet.
“Safety is 30% common sense; 80% compliance and the rest is good luck.” – Barry Spud
AGENDA

• Introductions
• What is safety?
• OSHA 1910
• How is safety related to Records & Document Management?
• Discussion
About Edwin

Edwin has over 15 years of experience in the world of Engineering Data Management. He started working with engineering focused solutions in early in 2003 and has implemented and designed solutions for small and Enterprise customers worldwide.
SAFETY;

The condition of being safe from undergoing or causing hurt, injury, or loss

A device (as on a weapon or a machine) designed to prevent inadvertent or hazardous operation
SMS COMMON COMPONENTS

**Safety Policy**
Establishes senior management’s commitment to continually improve safety; defines the methods, processes, and organizational structure needed to meet safety goals.

**Safety Assurance**
Evaluates the continued effectiveness of implemented risk control strategies; supports the identification of new hazards.

**Safety Risk Management**
Determines the need for, and adequacy of, new or revised risk controls based on the assessment of acceptable risk.

**Safety Promotion**
Includes training, communication, and other actions to create a positive safety culture within all levels of the workforce.
Safety culture has been defined in a variety of ways, including:

‘The way we do things around here’ (Confederation of British Industry (CBI) 1990);

‘A set of attitudes, beliefs or norms’ (Turner, 1989);

‘A constructed system of meaning (or shared understanding) through which the hazards of the world are understood’ (Pidgeon, 1998);

‘A safety ethic’ (Wert, 1986)
Safety Culture Maturity

- **Increasingly Informed**
  - Generative
    - "Safety is how we do business around here"

- **Increasing Trust**
  - Proactive
    - "We work on the problems that we still find"

- **Calculative**
  - "We have systems in place to manage all hazards"

- **Reactive**
  - "Safety is important; we do a lot every time we have an accident"

- **Pathological**
  - "Who cares as long as we’re not caught?"
How would you rate your company’s safety culture?

Pathological - Who cares as long as we’re not caught?

Reactive - safety is important; we do a lot every time we have an accident.

Calculative - We have system in place to manage all hazards.

Proactive - we work on the problems that we still find.

Generative - safety is how we do business around here.
HOW DO YOU MAKE THINGS SAFE

Hierarchy of Controls

- **Elimination**: Physically remove the hazard
- **Substitution**: Replace the hazard
- **Engineering Controls**: Isolate people from the hazard
- **Administrative Controls**: Change the way people work
- **PPE**: Protect the worker with Personal Protective Equipment
Which instruments is your company using to make things safe

PPE - Protect the worker with personal protective equipment

Administrative controls - Change the way people work

Engineering - Isolate people from the hazard

Substitution - Replace the hazard

Elimination - Physically remove the hazard
How do you make things safe

Hierarchy of Controls

- Elimination: Physically remove the hazard
- Substitution: Replace the hazard
- Engineering Controls: Isolate people from the hazard
- Administrative Controls: Change the way people work
- PPE: Protect the worker with Personal Protective Equipment

Enforced by regulation
Not being safe is dangerous and very expensive

OSHA (1910)
Enforcement cases with initial penalties of $40,000 or above in the first 5 months of 2019

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Has your company experienced regulatory fines?

Never

Very rarely

A bit more often then we would like to see

very often
Do you think that our field (records / document management) can contribute to better safety?

- Absolutely
- Likely - but not sure where or how
- Don't know
- I don't think so
- Absolutely not
SAFETY IS NOT A NICE TO HAVE ANYMORE

Bidding on work for a top company, requires you to show:

- Your active safety program
- A TCIR (total case incident rate) rating at or below industry average
- Proof of a pro-active safety culture

Safety and price are valued equally as part of bidder evaluation.
HOW TO MEASURE IT

The “industry” uses the OSHA trend for measuring safety
https://www.industrysafe.com/blog/osha-recordkeeping/what-is-a-total-case-incident-rate

You can calculate your TCIR or TRIR by using the following formula:
(Number of OSHA Recordable injuries and illnesses X 200,000) / Employee total hours worked =

Total Case Incident Rate
To break this formula down, employers multiply the number of OSHA Recordable injuries and illnesses occurring throughout the year by 200,000. To learn more about how to determine an OSHA recordable injury check out our Ultimate OSHA Recordkeeping Guide.
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Bureau of labor Statistics – 2016 – Non-Fatal Incidents  
https://www.bls.gov/web/osh/summ1_00.xlsx
How is this related to Document Management & Records Retention?
WHERE DOES IT GO WRONG?

OSHA's 2018 Top 10 Most Frequently Cited Violations

https://www.osha.gov/oshstats/commonstats.html
This standard addresses chemical hazards – both those chemicals produced in the workplace and those imported into the workplace. It also governs the communication of those hazards to workers.

TOP 5 SECTIONS CITED:
1. 1910.1200(e)(1) Employers shall develop, implement, and maintain at each workplace, a written hazard communication program which at
This standard outlines minimum performance requirements for the control of hazardous energy during servicing and maintenance of machines and equipment.

TOP 5 SECTIONS CITED:
1. 1910.147(c)(4)(i) Procedures shall be developed, documented and utilized for the control of potentially hazardous energy when employees are engaged in the activities covered by this section. – 587 violations

This standard addresses training requirements for employers in regards to fall protection.

TOP 5 SECTIONS CITED:
1. 1926.503(a)(1) The employer shall provide a training program for each employee who might be exposed to fall hazards. The program shall enable each employee to recognize the hazards of falling and shall train each employee in the procedures to be followed in order to minimize these hazards. – 1,283 violations

2. 1926.503(b)(1) The employer shall verify compliance with paragraph (a) of this section by preparing a written certification record. The written certification record shall contain the name or other identity of the employee trained, the date(s) of the training, and the signature of the person who conducted the training or the signature of the employer. If the employer relies on training conducted by another employer or completed prior to the effective date of this section, the certification record shall indicate the date the employer determined the prior training was adequate rather than the date of actual training. – 368

3. 1926.503(b)(3) Inadequacies in an affected employee’s knowledge or use of fall protection systems or equipment indicate that the employee has not retained the requisite understanding or skill. – 114

4. 1926.503(a)(2) The employer shall assure that each employee has been trained, as necessary, by a competent person. – 85

5. 1926.503(a)(2)(iii) The use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled access zones, and other protection to be used. – 46
Regulatory requirements (i.e. osha 1910)

Policy

Translated to

Safe Operations

Used by

SOP's

Impacts

Engineering

Company Oil & Co.

How well are systems designed with safety in mind?

Impacts

Day to day Operations

How well does the quality system (technology, culture, procedures) work?
WHERE DOES IT IMPACT

Availability of information;
• Datasheets / Lockout information
• SOP management
• Process / policy map

Where does it go wrong?
• Translation from digital to analog
• Workers in the field
THANKS

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RESOURCES

- https://www.isa.org/intech/20170604/
- https://www.osha.gov/Publications/osha3132.html
- https://www.industrysafe.com/blog/osha-recordkeeping/what-is-a-total-case-incident-rate
- https://www.bls.gov/web/osh/summ1_00.htm
- https://safetyrisk.net/about/
- https://pdfs.semanticscholar.org/9b1b/3e64217aa0fcf840536044e0f0ca9f6a8e37.pdf
- https://www.faa.gov/about/initiatives/sms/explained/components/
- https://ireportsource.com/do-you-have-these-4-foundational-pillars-in-your-safety-program/
- https://www.osha.gov/topcases/bystate.html
- https://www.bls.gov/web/osh/summ1_00.xlsx