



IRMI[®]

Preconference Workshop 6

***SAFETY AND RISK CONTROL—
ZERO ACCIDENTS***

Presented by

**Gale K. Nordling
Senior Vice President,
National Construction Advisor
Aon Risk Services
Construction Services Group**

Monday, November 8, 9 a.m.–4:30 p.m.



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Gale K. Nordling, JD
Senior Vice President
National Construction Advisor
Aon Risk Services, Construction Services Group

Mr. Nordling is a panelist for Monday's Preconference Workshop 6, "What's Hot in Construction Risk Management?" Located in Minneapolis, he is Aon Risk Services, Inc.'s, national adviser to the engineering, construction, product manufacturing, and other industries for issues including legal, contract language and claims, contract insurance language interrelationships, all types of insurance and surety coverage and claim issues, Subguard, professional errors and omissions, pollution, property, auto, business interruption, general liability, construction, OSHA, engineering, subrogation, workers compensation, U.S. Longshoremen and maritime claims, settlement techniques and options, collective bargaining of workers compensation, contract risk management issues, and drafting manuscript insurance and Subguard policy language. He also acts as a liaison to other professional resources.

Mr. Nordling has 33 years' experience as an engineer, practicing attorney, risk manager, insurance broker, and expert witness. He has been involved with the preparation, negotiation, settlement, litigation, arbitration, mediation, and insurance coverage of more than \$500 million of claims and contract disputes for engineers, contractors, suppliers, and owners such as universities, hospitals, states, airlines, casinos, and utilities. Mr. Nordling joined Aon in 1997 after serving as vice president and general counsel (including risk manager) at Cherne Contracting Corporation. He developed early alternatives and improvements to Subguard.

Mr. Nordling served on a national committee to create a national pooled inventory and management of safety-related spare equipment for all nuclear plants. Mr. Nordling worked at S.J. Groves & Sons, an international contractor, and while at Cherne Contracting established a state-of-the-art workers compensation claim management system, and a nationally recognized collective bargained workers compensation program. Mr. Nordling served on the Minnesota Governor's Task Force on Workers' Compensation Reform and has been a local and national speaker.

He has current licenses to practice in Minnesota and federal courts. Mr. Nordling has a B.S.EE from the University of Minnesota Institute of Technology and a J.D. from William Mitchell College of Law and is in the process of completing Chartered Property Casualty Underwriter (CPCU) designation requirements.

Notes

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SAFETY AND RISK CONTROL—ZERO ACCIDENTS

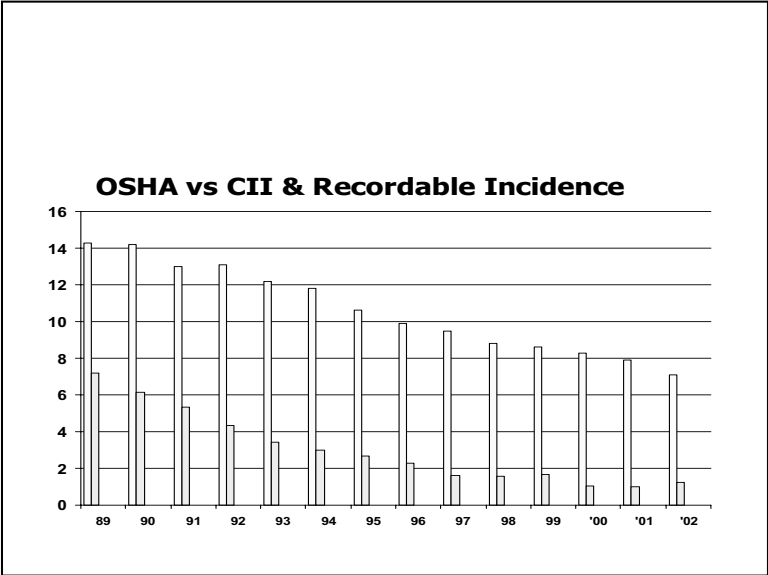
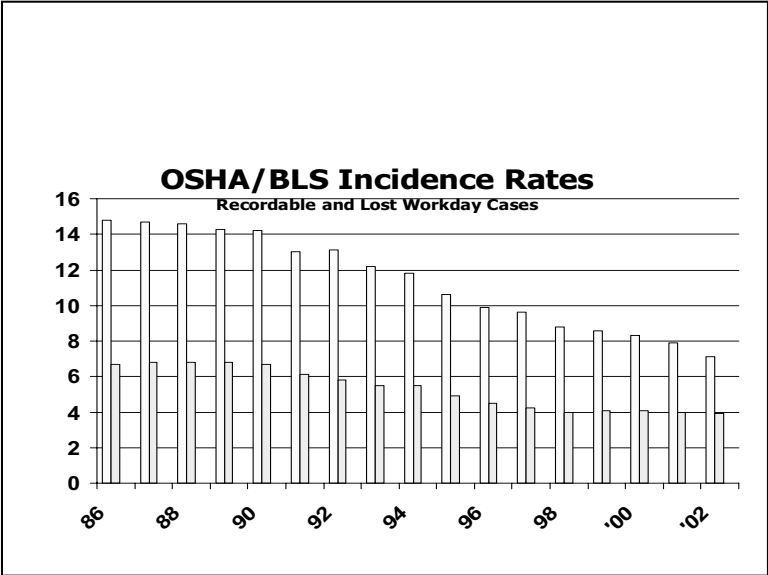
Gale K. Nordling
Aon Risk Services Construction Services Group

OSHA Statistics 02

- ➔ OSHA Construction RIR = 7.1
- ➔ OSHA Construction LTIR = 3.9

Construction Industry Institute Statistics

- ➔ CII RIR = 1.23
- ➔ CII LTIR = .43
- ➔ Covers 1,000,000,000 mhrs by CII members using “Zero Accident” practices



Zero Accident

What is it?
“The Platinum Standard”

The Economics -

Sample state estimated WC rates;

Carpenter NOC	\$ 30
Concrete	\$ 18
Insulation	\$ 28
Masonry	\$ 23
Steel Erection	\$ 101
Electrical	\$ 5
Excavation	\$ 9
Plumbing	<u>\$ 10</u>
Composite Average	\$ 28 = 28% of Labor

Profit and Productivity Ratios

Revenue	Labor (40%)	Profit Margin (2%)	mhrs. @ \$20/hr.
\$25,000,000	\$10,000,000	\$500,000	500,000
\$50,000,000	\$20,000,000	\$1,000,000	1,000,000
\$75,000,000	\$30,000,000	\$1,500,000	1,500,000
\$100,000,000	\$40,000,000	\$2,000,000	2,000,000
If applied all as a direct function of labor, the profit / mhr. (productivity) at \$20.00 per hour composite			
Equals \$1.00 / mhr.			

Insurance Guaranteed Cost Formula

$$\text{Payroll} \times \text{EMR} \times \text{Manual Rate}$$

EMR = Workers' Compensation Experience Modification which uses the last three complete years' loss experience (not to include current year).

EMR = 1.000 for "average" contractor

Impact of EMR on Insurance

If EMR = .600 then, cost = .600 x \$20.00 / mhr x manual rate
= \$12.00 / mhr x manual rate

If EMR = 1.40, then cost = 1.40 x \$20.00 / mhr x manual rate
= \$28.00 / mhr x manual rate

Expected Job Site Insurance Costs

Total Cost = Composite Rate x \$20 mhr.
(assuming EMR=1.00)

Equals .28 x 20 = \$ 5.60 / mhr.

Insurance Risk Transfer = .28 x \$5.60 = \$1.57 /mhr.

Claim Portion of Insurance = .72 x \$5.60 =

\$4.03 /mhr.

Equals Job Site Savings for ZERO ACCIDENTS

Total Job Cost of Injuries

Studies show indirect costs to be 1 to 20 times direct costs.

If only 1 times direct cost \$4.03 /mhr. could become as high as \$8.06 /mhr.

Some Indirect Costs

- ⇒ Injured employee time off
- ⇒ Injured employee reduced productivity during recovery
- ⇒ Reduced productivity for other workers
- ⇒ Training of replacement worker
- ⇒ Loss of productivity as new worker gets up to speed
- ⇒ Repair labor cost to job
- ⇒ Replacement of damaged materials

And More....

- ⇒ Job schedule/delay
- ⇒ Replacement equipment delivery delay and transportation costs
- ⇒ Equipment repair costs
- ⇒ OSHA fines
- ⇒ Legal defense costs
- ⇒ Management time to investigate & manage injury
- ⇒ Subsequent increased insurance costs
- ⇒ Expert defense costs
- ⇒ Impact on customer and adverse publicity

Zero Injury

- ⇒ DOES NOT mean you will never have another injury
- ⇒ DOES mean any injury is unacceptable
- ⇒ DOES NOT mean you will overuse light duty to avoid recordables
- ⇒ DOES mean you are working for NO INJURIES for as long a period as you can

Zero Accident Defined

Zero Accident philosophy is to eliminate all accidents on a construction site.

Zero Accident

- ⇒ All injuries and occupational illnesses can be prevented.
- ⇒ Safety is everyone's responsibility.
- ⇒ Management is directly accountable for preventing injuries and occupational illnesses.
- ⇒ Safety is a condition of employment.
- ⇒ Training is an essential element for a safe workplace.

Is Zero Accidents Achievable?

- ⇒ Cherne 2,547,000 mhrs. with zero IR (2001)
- ⇒ Cherne 4,425,000 mhrs. with zero LT
 - 7,840,000 mhrs. RIR .45 / LTIR .05
- ⇒ S&B Engineering
 - 800,000 mhrs. 2002 RIR .25
 - 35,000,000 mhrs. zero lost time to 2003
- ⇒ Day & Zimmerman NPS 11 times 0 LT in 1 M mhrs.
- ⇒ Fluor Daniel - Citgo 2,080,000 mhrs. zero recordables (1996)
- ⇒ Zachry 1,080,000 mhrs. zero recordables (1991)

Bottom-Line Savings

- ⇒ Eliminating Employee Injury
- ⇒ Eliminating Job Site Accidents
- ⇒ Increased Marketability of Insurance
- ⇒ Reducing Insurance Costs
- ⇒ Increased Employee Retention
- ⇒ Increase Quality and Productivity
- ⇒ Reduce the Need for Training

Creating Cultural Change

- ⇒ Buy in at all levels
 - Show economics
 - Bring in expert
 - Proof that zero accidents is feasible

Creating Cultural Change

- ⇒ Participation and awareness
 - Corporate safety committee
 - Job site safety committee
 - Include labor
 - Include subcontractors
 - Include owner
 - Training and keeping current (use matrix)

Creating Cultural Change

- Proactive Observation & Feedback
 - (Dupont STOP Safety Pays)
- Doctor / Clinic prejob interview and visit
- Accident Investigation
 - Upper management involvement within 24 hrs.
 - Take employee to and participate with doctor

Creating Cultural Change

- Modified duty
 - No light-duty job description
 - Prepare ADA job descriptions in advance
- Vigorous defense if employee does not cooperate
- Subrogation of claims
- Savings / feedback to field and for each job site

Safety Pre-Project Planning

- ⇒ Safety Goals
- ⇒ Safety Person/Personnel
- ⇒ Replacement Employee Evaluation

Safety Pre-Task Planning

- ⇒ Task Hazard Analysis
- ⇒ Task Training

Safety Orientation and Training

- Site Orientation
- Owner Involved In Orientation
- Safety Policies & Procedures
- Project-Specific Orientation
- Formal Safety Training

Written Safety Incentive Program

- Cents Per Hour for Workers
- Spot Cash Incentives Used with Workers
- Milestone Cash Incentives Given to Workers
- End of Project Incentives Given to Workers

Alcohol & Substance Abuse Program (ASAP)

- ⇒ Screening done for alcohol & drugs
- ⇒ Screening conducted at random
- ⇒ Inspections for contraband conducted
- ⇒ Post accident screening done for all employees
- ⇒ All project contractors have ASAP

Accident / Incident Investigation

- ⇒ Incidents investigated
- ⇒ Incidents reported to home office
- ⇒ Accidents without injury investigated
- ⇒ Project accidents review team established for all accidents or incidents
- ⇒ Project work exposure hours & safety statistics reported to home office

Zero Accident

- Safety audits must be conducted
- Safe work practices should be reinforced and all unsafe acts and unsafe conditions must be corrected promptly
- It is essential to investigate injuries and all occupational illnesses as well as incidents with the potential for injury

Management / Leadership Keys

- Top management passion for ZERO
- CEO sets the expectation for ZERO
- Injury becomes UNACCEPTABLE
- Embrace the ZERO injury techniques
- Train your leaders for their “buy in”
- Convince your workers for their input
- Measure unsafe behavior

Owners Can Influence

- ⇒ Setting safety standards for selection of contractors
- ⇒ Establishing contractual remedies for failure to abide by safety standards
- ⇒ Monitor safety performance
- ⇒ Play active role in job orientation
- ⇒ Insist on immediate notification of all incidents
- ⇒ Participate in all accident investigations
- ⇒ Provide feedback to contractors
- ⇒ Involvement in safety recognition program

Partnerships and Relationships

- ⇒ Better likelihood of achieving a long-term relationship with your insurance provider
 - Underwriters will be more forgiving in the event of a larger loss or “bad” year
 - Underwriters will make you that extra effort to keep you as a customer on renewal
 - Eliminates potential for transition costs of changing insurance carriers
 - Underwriters more likely to “bend the rules” to satisfy your needs
 - More likely to get broader coverages

Services

- Claims Service
 - More likely to get concession
 - Underwriter more likely to intervene on your behalf
 - More likely to be able to unbundle claims handling
- Loss Control / Safety
 - Underwriter loads less \$ into pricing
 - More likely to limit carrier loss control people visits to when you want them

WC Experience Modification

- Lower insurance costs
- Marketability to your customers