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Newly Employed and Quickly Injured: A Legal Solution

Curt DeWeese, PT

Agenda…

- Introduction
- Brief background on MSD's
- Approaches to mitigate MSD's
- Post offer pre-employment screening
- Return to work screening
- Legal basis
- A Case Study
- Q & A

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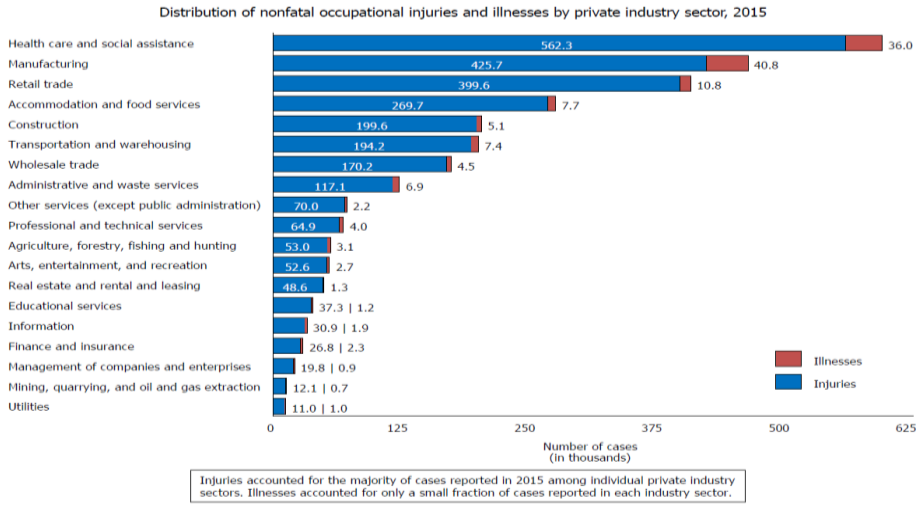
MSD Incidence…



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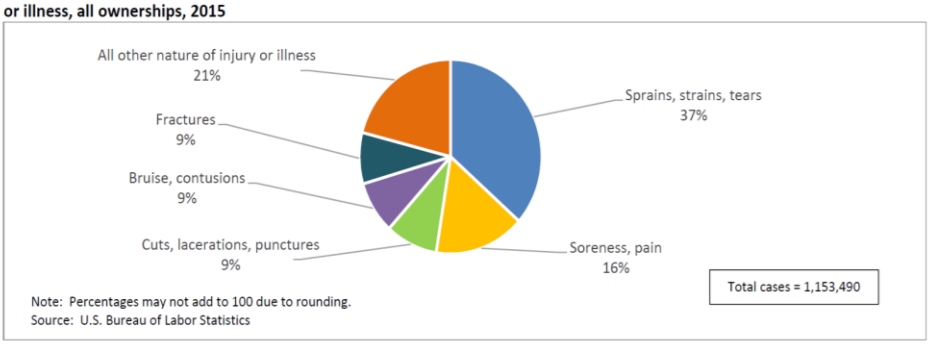
MSD Incidence…

Chart D. Percent distribution for occupational injuries and illnesses with days away from work by selected nature of injury or illness, all ownerships, 2015



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MSD Costs…

- Cost
  - Average MSD claim $30,000*
  - Direct and indirect costs
  - Reserves
  - Rotator Cuff repair- ~$90k
  - Back or Neck surgery ~$130-$150K
  - You are aware of your own claim costs

*Traveler's Insurance

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MSD's…

- Approaches to mitigate MSD's
  - Engineering controls
  - Administrative Controls
  - Training

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MSD's…

- What solution exists if these strategies are not solving the issue?

Candidate screening

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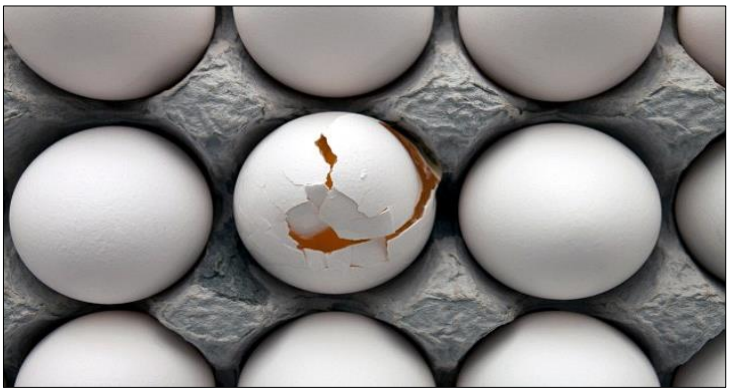
Why Screen…



It's about getting quality in…

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Why Screen…

It's about organizational dollars…

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Why Screen…

Injury Prevention

- Up to 2/3 of injuries occur within the first 12 to 24 months of hire
- $84,000 - $168,000 for a neck/back injury

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Why Screen…

- Proactive solution to reduce work injuries and their associated costs
- Specific to large muscle Sprains and Strains

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Why Screen …

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Screen Development…

Pre-work Screen Development

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Job Demand Analysis…

Meet with Management and employees to identify the Essential Functions of the job.

Pre-work Screen Development

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Essential Functions…

- What is an Function Essential? Per the EEOC…
  - The position exists to perform the function. Removing the function would fundamentally alter the job.

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Essential Functions…

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  - The position exists to perform the function. Removing the function would fundamentally alter the job.
  - There are not a number of other employees available to do the job or among who job tasks can be distributed

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Essential Functions…

- What is an Function Essential? Per the EEOC…
  - The position exists to perform the function. Removing the function would fundamentally alter the job.
  - There are not a number of other employees available to do the job or among who job tasks can be distributed
  - The function requires a certain degree of skill or specialization that is needed on the job.

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Essential Functions…

- It is important to understand:
  - The employer has the right to:
    - *Determine the essential functions*
    - *Determine the educational training requirements*
    - *Determine the performance standards of the job*

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Essential Functions…

- It is important to understand:
  - The employer has the right to:
    - *Determine the essential functions*
    - *Determine the educational training requirements*
    - *Determine the performance standards of the job*
  - As long as standards and requirements are consistently applied and are not established specifically to discriminate against people with disabilities. (Baum, et al., 2004)

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Essential Functions…

"The Job" and its **"Essential Functions"**

- **Single Tasks** → **Critical Demands**
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Essential Functions…

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Job Demand Analysis…

Meet with Management to identify the Essential Functions of the job.

Gather field data. Measurement of physical demands of the Essential Functions over multiple inputs.

Pre-work Screen Development

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Pre-Trip Inspections…

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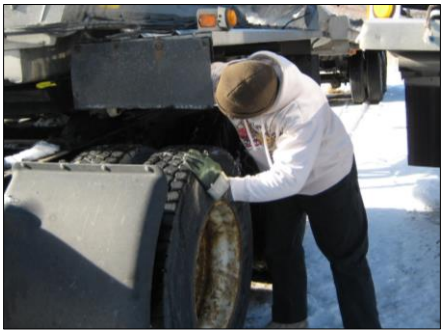
Field Measurements…

Cranking Dollies

Pulling 5th Wheels



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Hose Management…

Physical Demands:

- Lifting
- Pulling
- Pushing
- Bending
- Twisting

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Hose Management…

Hoses

2 inch 3 inch 4 inch

- Range in weight 23-60 lbs.

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Hose Management…

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Traversing the Cat-walk…

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Measurement…

Essential Function Measurements														
Truck	Truck / Trailer ID	Open Hood Front			Open Hood Side			Close Hood			Pull 5th Wheel			
1	432-7306	45	44	43	27	31	27	57	53	54	104	123	115	
Average		44.0			28.3			54.7			114.0			
2	478-1006	30	32	28	27	27	28	37	35	35	159	180	181	
Average		30.0			27.3			35.7			173.3			
3	478-0204	80	73	70	30	34	35	44	42	41	126	123	122	
Average		74.3			33.0			42.3			123.7			
4	478-8277	43	43	41	31	31	32	51	54	51	128	145	129	
Average		42.3			31.3			52.0			134.0			
5	432-8232	28	31	38	31	31	29	36	37	37	197	214	2	
Average		32.3			30.3			36.7			208.3			
6	478-6417	77	82	82	67	67	68	46	47	47	173	224	217	
Average		80.3			67.3			46.7			204.7			
7	432-8209	54	51	51	43	39	40	64	60	67	178	172	168	
Average		52.0			40.7			63.7			172.7			
8	434-8010	29	27	28	24	22	21	44	48	49	183	208	234	
Average		28.0			22.3			47.0			208.3			
9	432-7182	56	54	54	43	44	46	71	67	72	155	165	160	
Average		54.7			44.3			70.0			160.0			
10	478-1074	49	46	49	41	38	41	36	40	39	113	92	106	
Average		48.0			40.0			38.3			103.7			

Multiple Measurements over Multiple Inputs

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Critical Demands…

B. Functions Activities

Key			
C = Continuous	F = Frequent	O = Occasional	N = Not Applicable
More than 5.5 hours (67-100%) or > 200 reps	2.5 to 5.5 hours (34-66%) or 33-200 reps	Less than 2.5 hours (1-33%) or 1-32 reps	Not at all or rarely

Activity	C	F	O	N	Essential Function	Comments
Reach below / at / above shoulder			X		Yes	
Pushing / Pulling			X		Yes	
Twisting / Bending		X			Yes	
Squatting / Stooping		X			Yes	
Climbing Stairs	X				Yes	General maintenance activities; taking samples
Climbing Ladders				X	Yes	
Walking	X				Yes	General maintenance activities; taking samples
Standing	X				Yes	General maintenance activities; taking samples
Sitting			X		Yes	
Repetitive Hand / Wrist Activities			X		Yes	
Finger / Grasping / Handling			X		Yes	
Balancing			X		Yes	
Lift / Carry / Lower 0 - 10 lbs.		X			Yes	General maintenance activities; taking samples;
Lift / Carry / Lower 10 - 30 lbs.		X			Yes	General maintenance activities; loading chemicals; shutdown activities
Lift / Carry / Lower 31 - 50 lbs.		X			Yes	General maintenance activities; loading chemicals; shutdown activities
Lift / Carry / Lower > 50 lbs.			X		Yes	General maintenance activities; loading chemicals; shutdown activities

Physical Demands

- Reaching
- Push / Pulling
- Twisting / Bending
- Squatting / Climbing
- Walking / Standing / Sitting
- Repetitive Hand / Wrist
- Grasping
- Lifting / Carrying

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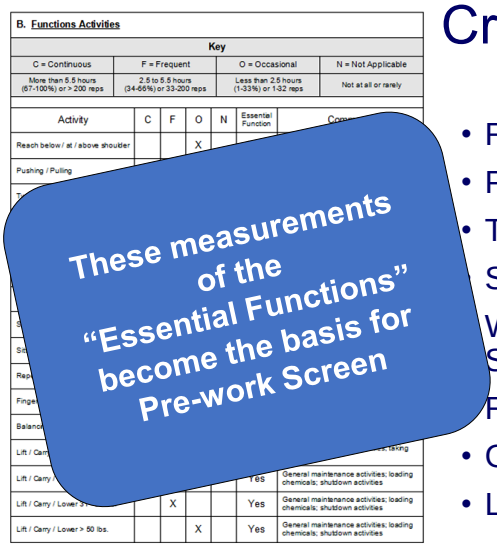

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Activity	C	F	O	N	Essential Function	Comm
Reach below / at / above shoulder			X			
Pushing / Pulling						
Lift / Carry					Yes	General maintenance activities; loading chemicals; shutdown activities
Lift / Carry / Lower > [illegible]		X			Yes	General maintenance activities; loading chemicals; shutdown activities
Lift / Carry / Lower > 50 lbs.			X		Yes	General maintenance activities; loading chemicals; shutdown activities

These measurements of the "Essential Functions" become the basis for Pre-work Screen

Critical Demands…

Physical Demands

- Reaching
- Push / Pulling
- Twisting / Bending
- Squatting / Climbing
- Walking / Standing / Sitting
- Repetitive Hand / Wrist
- Grasping
- Lifting / Carrying

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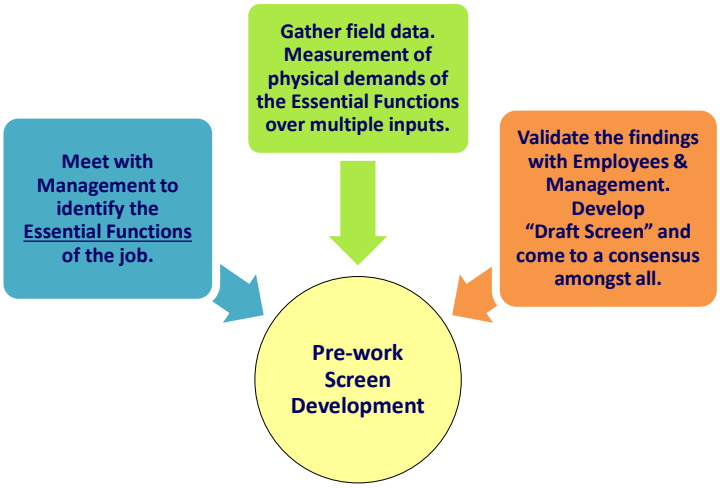
Screen Development…



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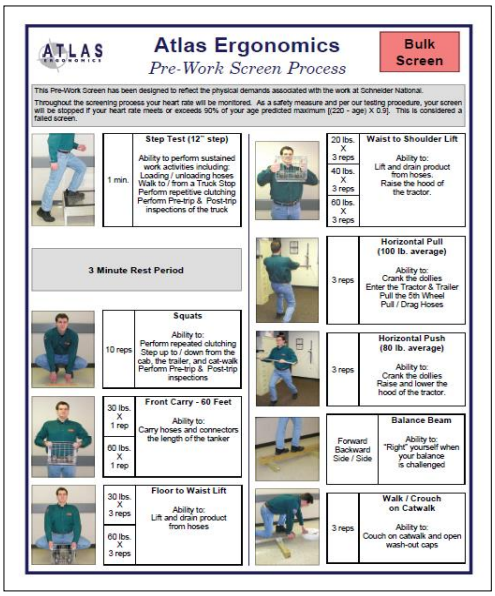

ATLAS ERGONOMICS

Atlas Ergonomics

Pre-Work Screen Process

Bulk Screen

This Pre-Work Screen has been designed to reflect the physical demands associated with the work at Schneider National.

Throughout the screening process your heart rate will be monitored. As a safety measure and per our testing procedure, your screen will be stopped if your heart rate meets or exceeds 90% of your age predicted maximum [(220 - age) X 0.9]. This is considered a failed screen.

1 min.	**Step Test (12" step)**	Ability to perform sustained work activities including: Loading / unloading hoses Walk to / from a Truck Stop Perform repetitive clutching Perform Pre-trip & Post-trip inspections of the truck
3 Minute Rest Period		
10 reps	**Squats**	Ability to: Perform repeated clutching Step up to / down from the cab, the trailer, and cat-walk Perform Pre-trip & Post-trip inspections
30 lbs. X 1 rep 60 lbs. X 1 rep	**Front Carry - 60 Feet**	Ability to: Carry hoses and connectors the length of the tanker
30 lbs. X 3 reps 60 lbs. X 3 reps	**Floor to Waist Lift**	Ability to: Lift and drain product from hoses
20 lbs. X 3 reps 40 lbs. X 3 reps 60 lbs. X 3 reps	**Waist to Shoulder Lift**	Ability to: Lift and drain product from hoses. Raise the hood of the tractor.
3 reps	**Horizontal Pull (100 lb. average)**	Ability to: Crank the dollies Enter the Tractor & Trailer Pull the 5th Wheel Pull / Drag Hoses
3 reps	**Horizontal Push (80 lb. average)**	Ability to: Crank the dollies Raise and lower the hood of the tractor.
Forward Backward Side / Side	**Balance Beam**	Ability to: "Right" yourself when your balance is challenged
3 reps	**Walk / Crouch on Catwalk**	Ability to: Couch on catwalk and open wash-out caps

Test Protocol…

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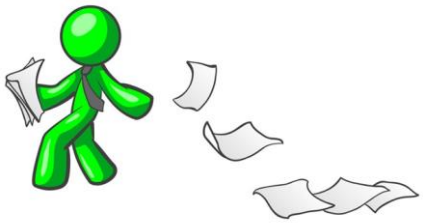
Validation & Consensus…

- Documentation Trail
  - Must meet validation requirements (Dept. of Labor)



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Validation & Consensus…

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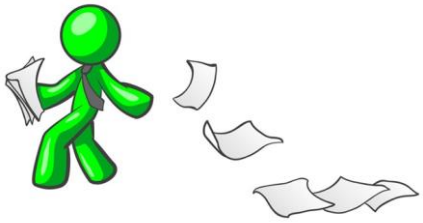
  - Based on thorough job analysis



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Validation & Consensus…

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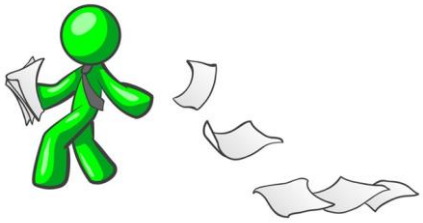
  - Based on thorough job analysis
  - Employee / Management Review



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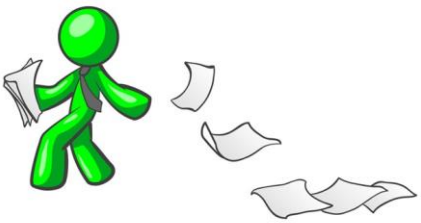
Validation & Consensus…

- Documentation Trail
  - Must meet validation requirements (Dept. of Labor)
  - Based on thorough job analysis
  - Employee / Management Review
  - Validation is an ongoing process



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Validation & Consensus…

- More on validation
  - Bi-annual review of Essential Functions

PWS Re-Validation

Name (Please Print)	Signature	Date	Reviewed Essential Functions are representative of current work environment
Richard R. Beerse Jr.	[illegible]	8/20/2009	Yes / No RRB
TAUFIQ A. DEANE	Taufiq Ajmat Deane	8/20/2009	Yes / No TD.
Fofo Sokimi	[illegible]	8/20/2009	Yes / No FS.
Dale French	Dale French	8/20/2009	Yes / No DF
LISA FORTUN	Lisa Fortun	8/20/2009	Yes / No LF
Paul Wedyck	[illegible]	8/20/2009	Yes / No P/W
WADE NESS	[illegible]	8/20/2009	Yes / No WEN

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Screen Process…

- Screen is built- now what?
- Next steps
  - Policy on how to use
  - Understand how you will respond to applicants reporting disability
  - These points need to be addressed before the process starts
- Communication of results

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Best Applications…

- Post Offer Testing
- Maximum results and return when used with:
  - Early tenure report of injuries- first 12-18 months
  - Injuries are large muscle groups- back, neck, shoulder
  - Injury types are sprains and strains
- Screening is not a crystal ball
- Not a good tool to rule out tolerance for repetitive activities

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Best Applications…

- Return to Work Testing
- Timing
  - Soon after injury- objective information
  - Regular intervals to progress RTW
- Communication
  - HR, Supervisor and Employee all understand what can be done
  - Objective data
  - Progression to full duty

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Legal Considerations…

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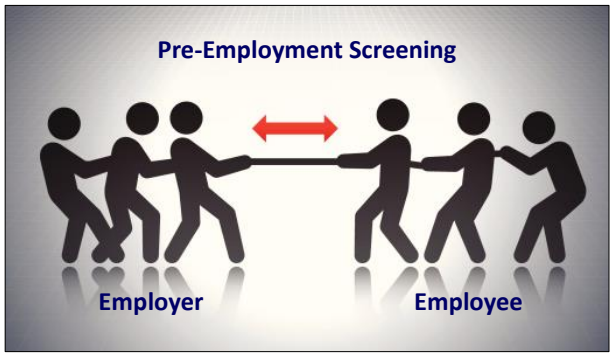
Legal Scrutiny of PWS…

- Legal issues arise when different perspectives and expectations collide.



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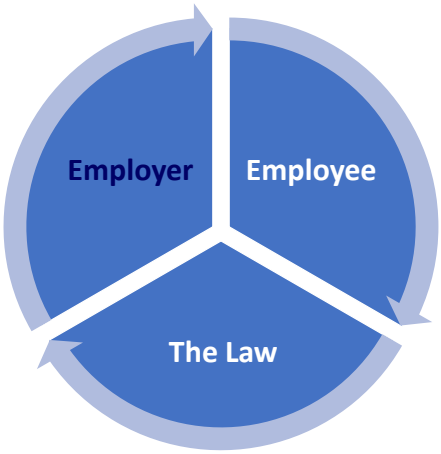
Legal Scrutiny of PWS…

In order to run a safe & profitable business, we need to know the work capabilities of our employees.



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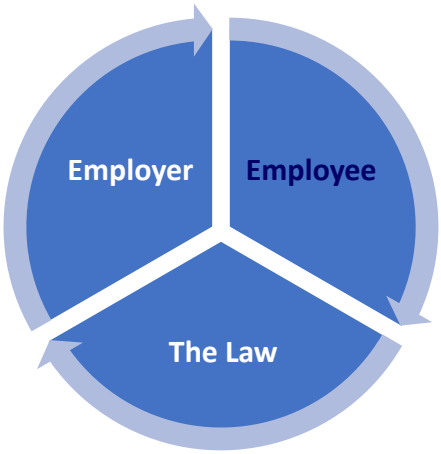
Legal Scrutiny of PWS…



My medical history, health, etc. are none of your business and I don't want to be ruled out just because an employer is nervous or doesn't understand my condition.

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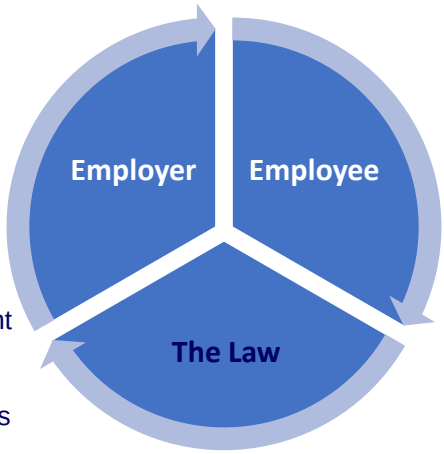
Legal Scrutiny of PWS…

Employers' right to gather/use information about applicant or employee's physical/mental health history, current status, capabilities and genetic information is closely regulated.



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Legal Scrutiny of PWS…

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Applicable Laws…

American with Disability Act ("ADA")

- Enacted in 1990 and significantly amended in 2008.
- Prohibits discrimination against qualified individuals who have, are regarded as having, or have a record of having a disability.
- Regulates the sequence of an employer's hiring practices.
  - Screen is a medical test
  - Must have conditional offer in order to perform
  - Must be used on all candidates applying for specific job

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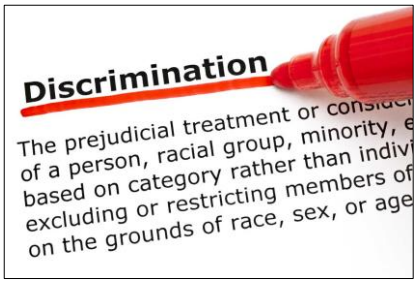
ADA: The Basics…

- Many employers have an overly simplistic view of the ADA, namely, that it prohibits "discrimination against disabled people"…
  - So long as they do not have an active prejudice against disabled people, they will have no ADA legal issues.
  - Neither are true.



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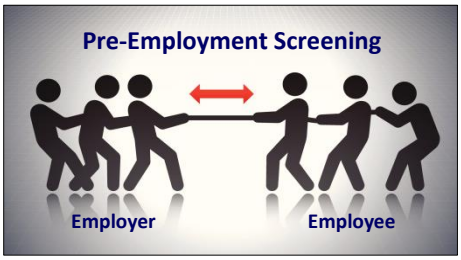
ADA: The Basics…

- The ADA is a very complex and nuanced law that tries to strike a delicate balance between…
  - An individual's right to employment despite having (or being perceived to having) a physical or mental condition and…
  - An employer's right to insure that all employees can safely and adequately perform their jobs.



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ADA: The Basics…

- Let's look more specifically at the ADA, relative to pre-employment screening programs.
- ADA only protects **QUALIFIED individuals with a DISABILITY**.
  - A **QUALIFIED** disabled person is one who can still perform the **ESSENTIAL FUNCTIONS** (with or without "reasonable accommodation") of his/her job despite the DISABILITY.

ADA: The Basics…

- The term, **QUALIFIED**, is very important to understand.
- Said another way, in order to be protected by the ADA - an individual can be:
  - (1) disabled but
  - (2) not too disabled
- Understand… pre-employment screening helps an employer decide who NOT to hire, hence, the screening cannot set a bar that is higher than the ADA's.

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ADA: The Basics…

- Under the ADA, it is only permissible to deny someone with a disability a work opportunity when he/she is unable to perform one or more of the **ESSENTIAL FUNCTIONS** of the particular job(s) being sought, as that term is defined by the ADA.

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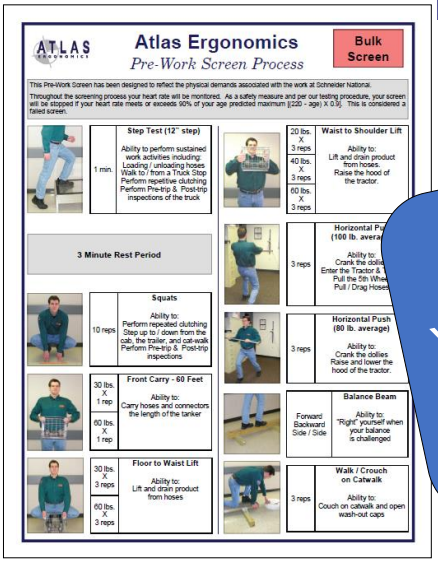
Essential Functions…



Again…
You, as the Employer, get to determine these "Essential Functions"

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Case Study…

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PWS Outcomes…

- Four year data set
  - 2 years prior to the implementation of Pre-work Screen
  - 2 years post implementation of Pre-work Screen
- Key Measures
  - Number of Injuries
  - Total Cost of Injuries
  - Average Cost of Injuries
  - Lost Work Day Cases
  - Lost Work Days
  - Injuries Types
  - Causation

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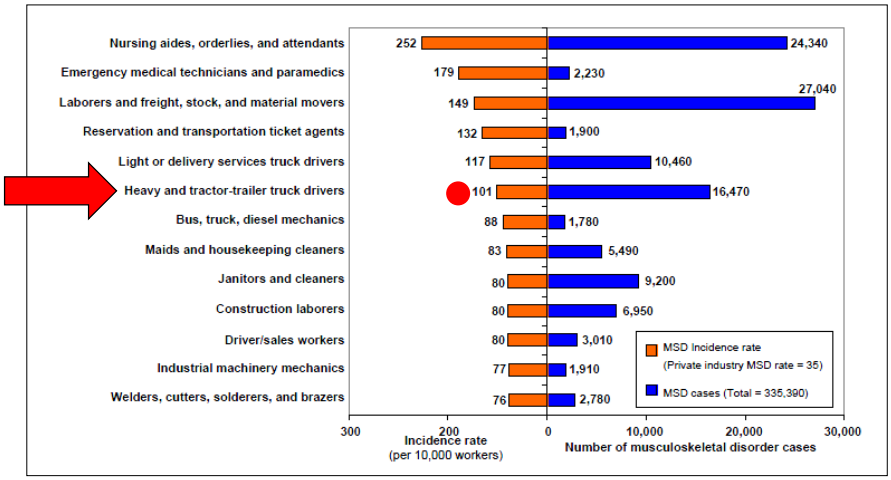
Background Information…



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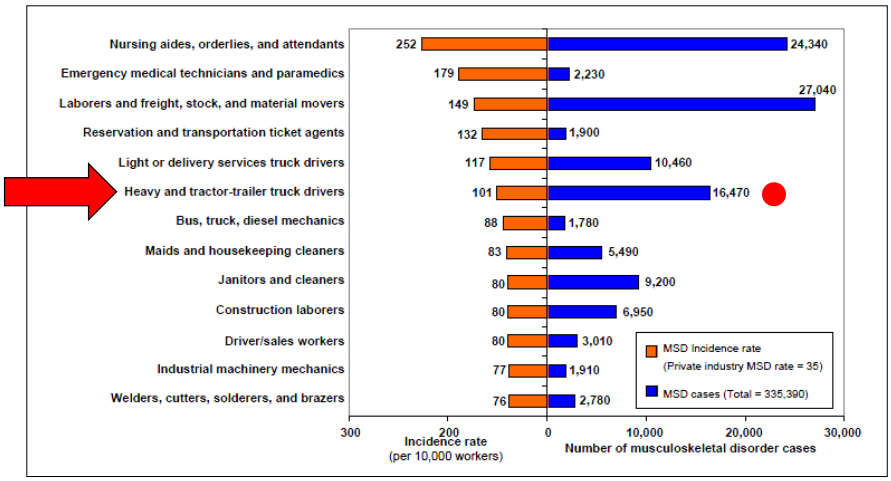

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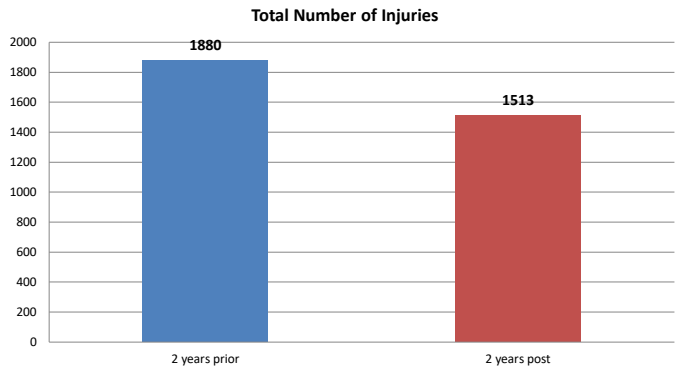
PWS Outcomes…



20% Reduction in Number of Injuries

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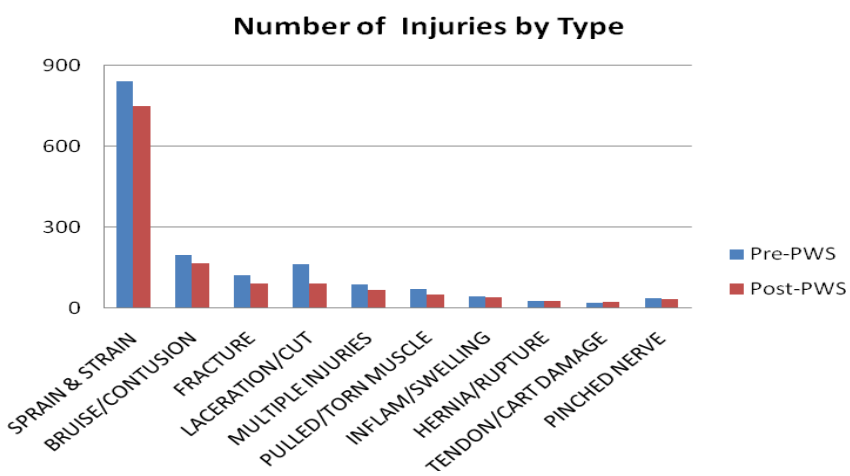
PWS Outcomes…



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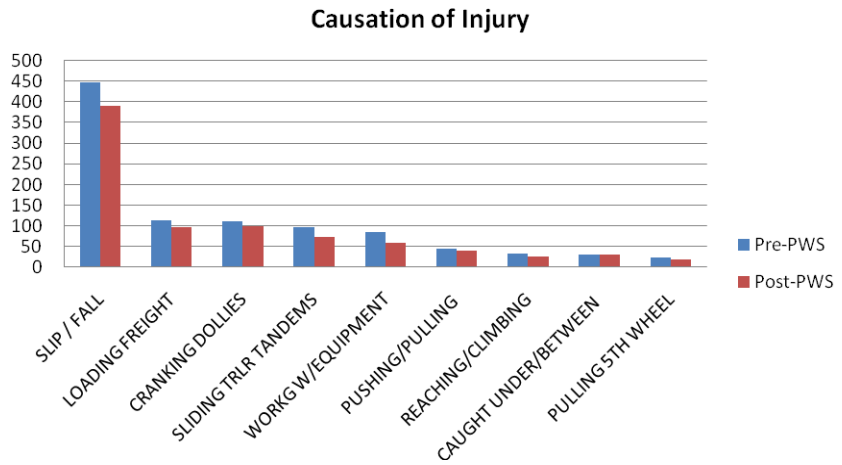

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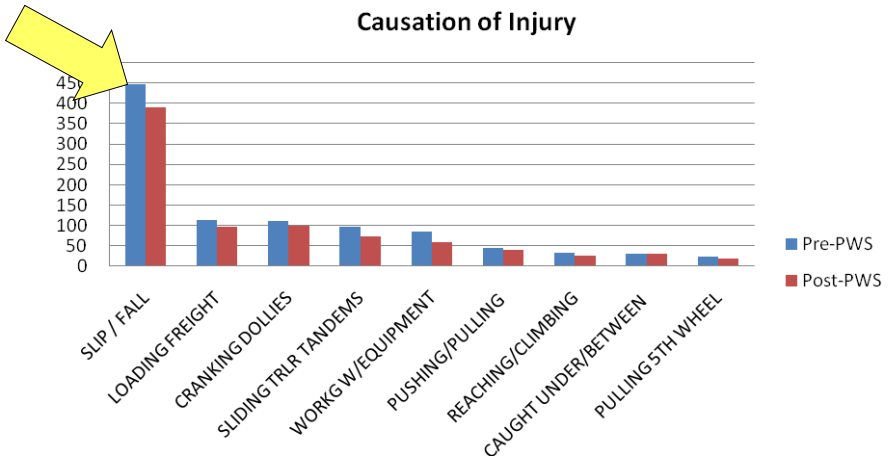
PWS Outcomes…



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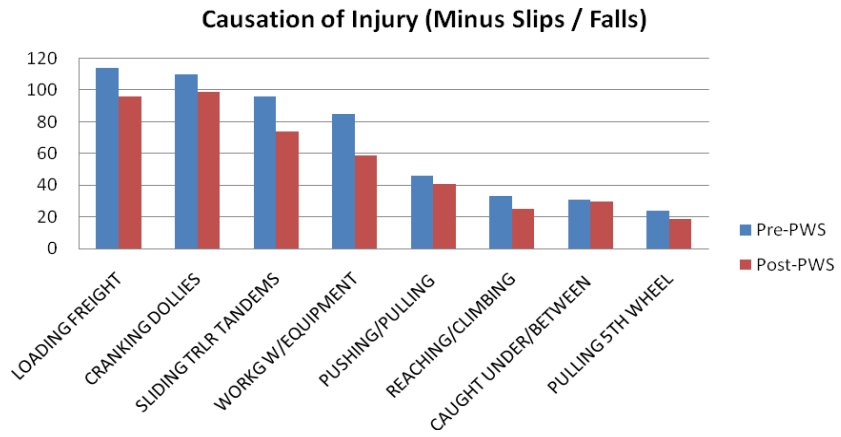

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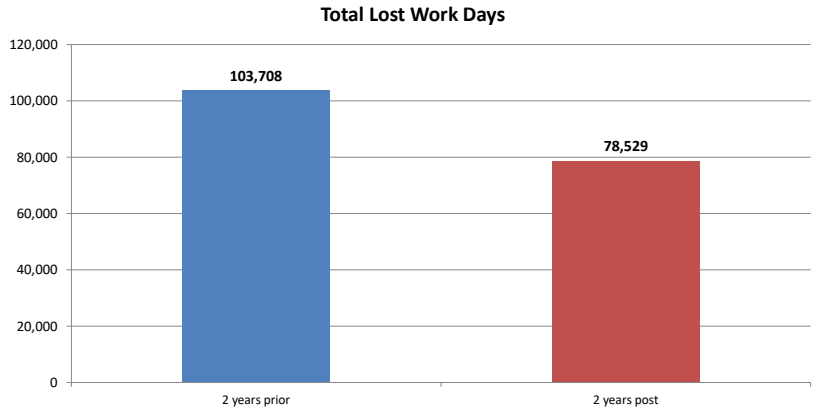

24% Reduction in the Number of LWDs

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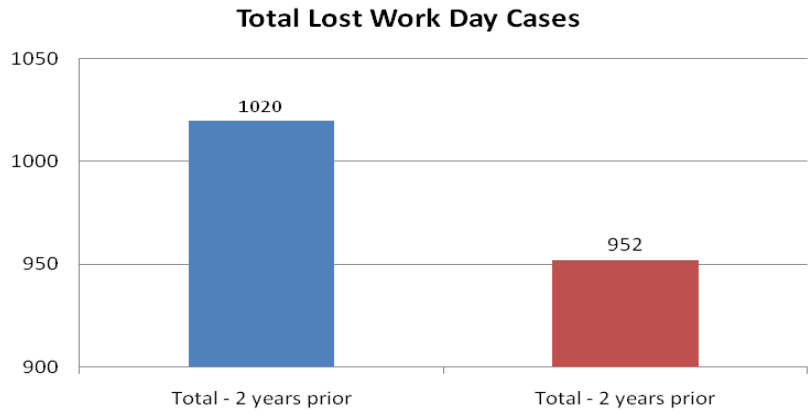
PWS Outcomes…



7% Reduction in the Number of LWDC

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Return on Investment…

- 2 years prior to PWS Implementation
  - 1880 injuries
  - Total direct cost = $36 M
  - Average direct cost / injury = $19,000
- 2 years post PWS Implementation
  - 1513 injuries (367 fewer)
  - @ historic cost of $19,000 per injury
  - Direct cost saving = $6,973,000

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Return on Investment…

- Investment to provide PWS = $1,107,000
- Saved $6,973,000 over the investment of $1,107,000
- On Direct Costs only… made $6.30 for every dollar invested into the program

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Return on Investment…

	Indirect Multiple of 3	Indirect Multiple of 4	Indirect Multiple of 5	Indirect Multiple of 6	Indirect Multiple of 7
Direct Cost					
Indirect Cost					
Total Cost					

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Return on Investment…

	Indirect Multiple of 3	Indirect Multiple of 4	Indirect Multiple of 5	Indirect Multiple of 6	Indirect Multiple of 7
Direct Cost	$6.9 M	$6.9 M	$6.9 M	$6.9 M	$6.9 M
Indirect Cost					
Total Cost					

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Return on Investment…

	Indirect Multiple of 3	Indirect Multiple of 4	Indirect Multiple of 5	Indirect Multiple of 6	Indirect Multiple of 7
Direct Cost	$6.9 M	$6.9 M	$6.9 M	$6.9 M	$6.9 M
Indirect Cost	$20.9 M	$27.8 M	$34.7 M	$41.6 M	$48.5 M
Total Cost					

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Return on Investment…

	Indirect Multiple of 3	Indirect Multiple of 4	Indirect Multiple of 5	Indirect Multiple of 6	Indirect Multiple of 7
Direct Cost	$6.9 M	$6.9 M	$6.9 M	$6.9 M	$6.9 M
Indirect Cost	$20.9 M	$27.8 M	$34.7 M	$41.6 M	$48.5 M
Total Cost	$27.8 M	$34.7 M	$41.6 M	$48.5 M	$55.4 M

Return on Investment…

- Using conservative estimates (Indirect Multiple of 3)
- Total cost savings = $27.8 million over the investment of $1.1 million
- ≈ $25.00 for every dollar invested in the program.

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Questions…

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