

Fit for Duty



PRESENTED TO NEW BRUNSWICK CONSTRUCTION SAFETY ASSOCIATION PROFESSIONAL
DEVELOPMENT DAY

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NOVEMBER 2, 2023

Objectives

- ▶ Define Fit for duty.
- ▶ Understand the conditions that make up Fit for Duty.
- ▶ Review some strategies to address the issues.

Before we begin

This presentation is not legal advice and is intended to generate discussion and help you identify potential issues.

Fit for Duty

What do you think of when we use the term Fit for Duty?

Most people think of Drug and Alcohol Policies and Testing programs.



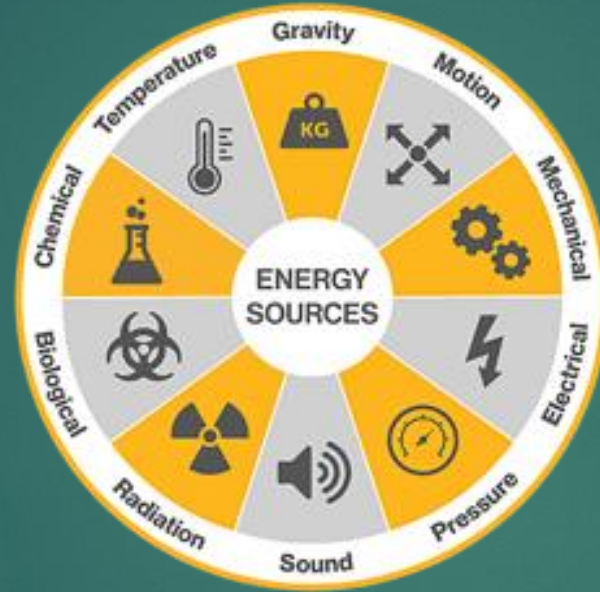
Fit for duty – What does it mean

- ▶ According to the American College of Occupational and Environmental Medicine; Fit for duty means:
 - ▶ Being Fit for Duty means that an employee's physical, emotional and mental condition allow a person to perform essential job duties in a proper, safe and competent manner.
 - ▶ An unfit employee is one who cannot perform those duties according to these standards, regardless of reason.



Risk Management

- ▶ Traditionally we think of hazards as seen in the energy wheel



- ▶ The conditions we will be discussing are hazards that can lead to risks.

Risk Perception and Tolerance Model

Exposure

IDENTIFY the Hazard
Do I See It?

The hazard is NOT RECOGNIZED

At Risk Behavior

PERCEIVE the Risk
Do I Understand it?

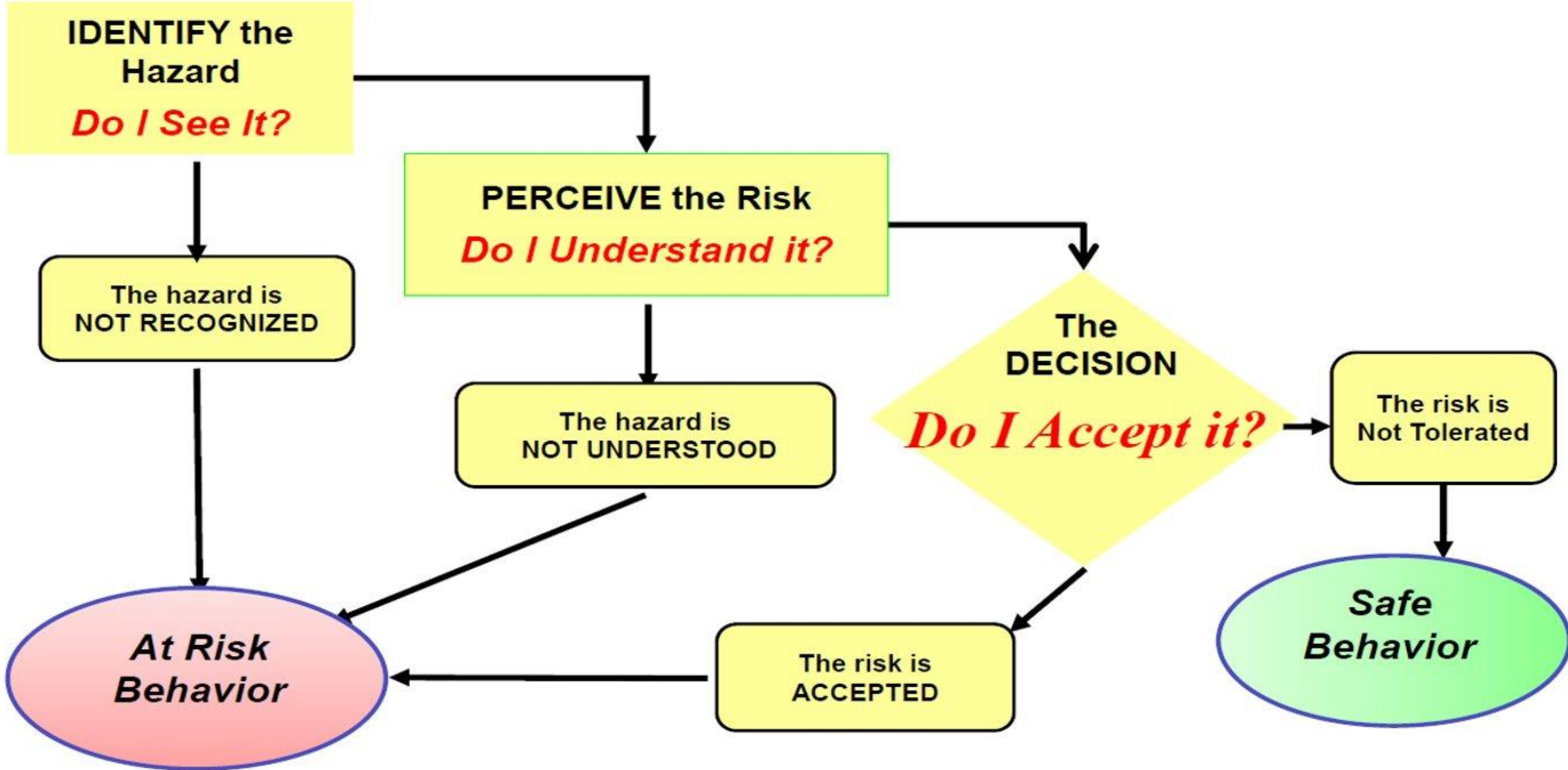
The hazard is NOT UNDERSTOOD

The risk is ACCEPTED

The DECISION
Do I Accept it?

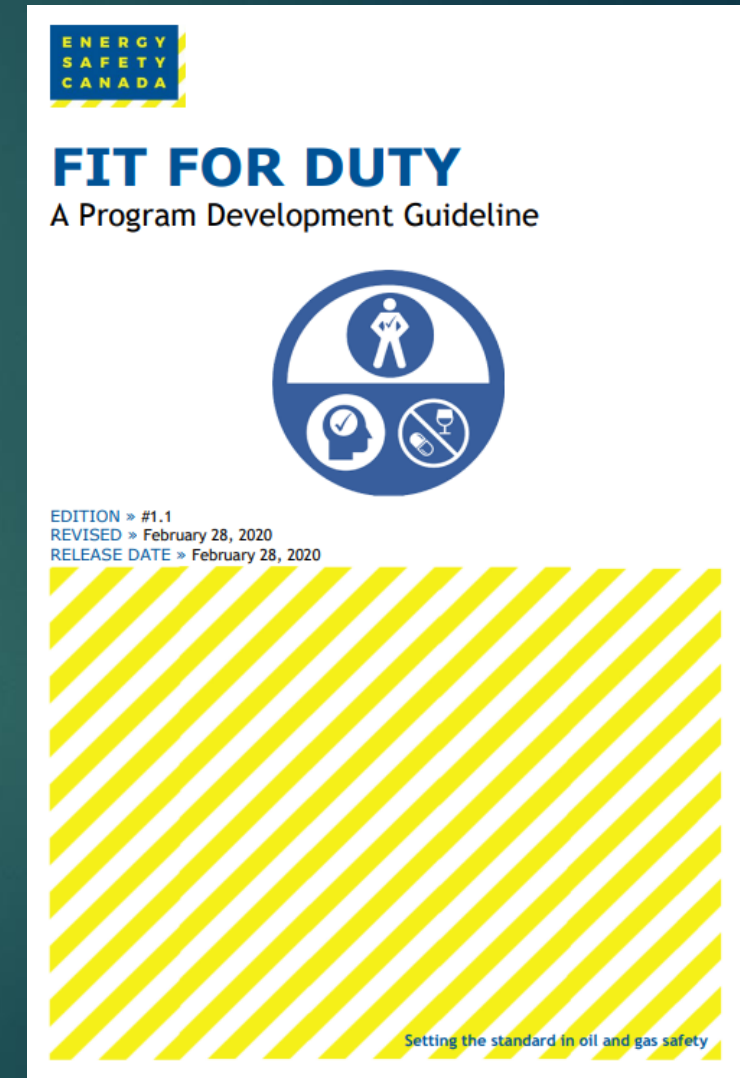
The risk is Not Tolerated

Safe Behavior



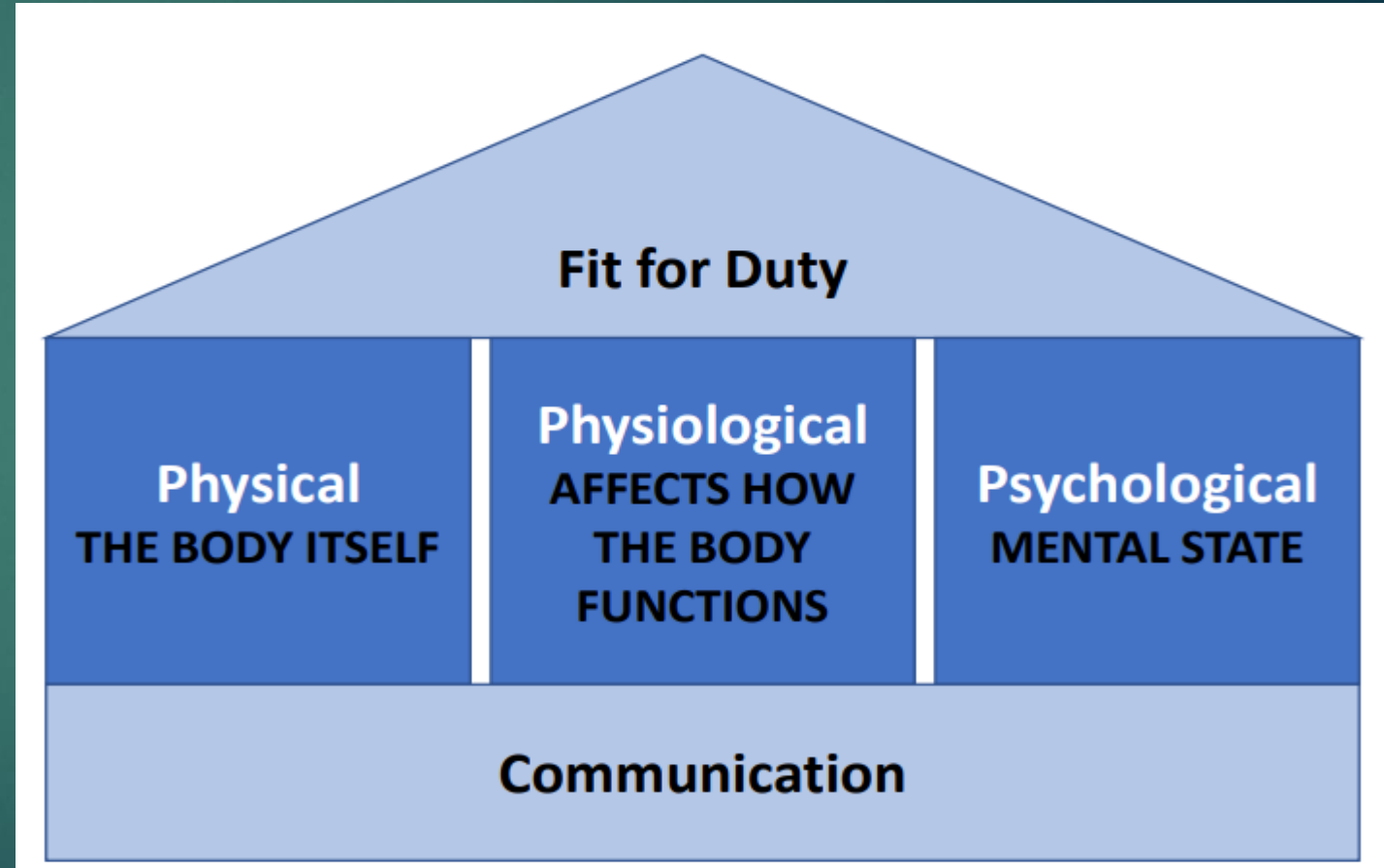
Fit for duty

- ▶ In 2020, the group at Energy Safety Canada developed a program guideline for Fit for Duty.
- ▶ This presentation will use the information from the guideline to outline the many sides of Fit for Duty.
- ▶ References are included at the end of the presentation.



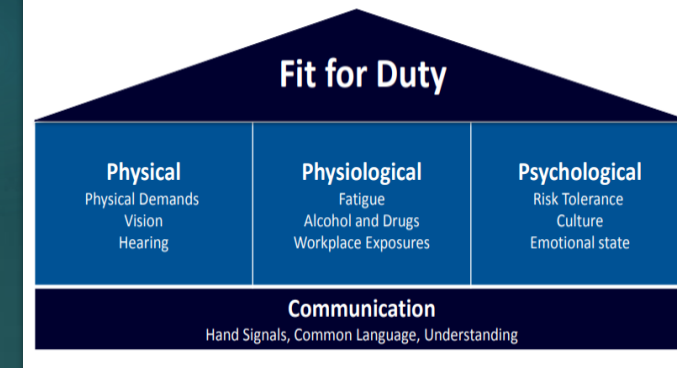
Fit for duty

Energy Safety Canada developed this model as a comprehensive approach to Fit for Duty.



Fit for duty “house model”

▶ The “house” is made up of 3 pillars and a base



▶ Pillar 1 made up of physical conditions including physical demands, strengths, vision, hearing, etc.

▶ Pillar 2 made up of physiological conditions including fatigue, stress, alcohol and drugs, workplace exposures, etc.

▶ Pillar 3 made up of psychological conditions making up the workers mental state including commitment, risk tolerance, culture, phobias, fears, etc.

▶ The base of the house is communication.

Pillar 1 – Physical Requirements

- ▶ What are the physical demands of the jobs you have?
- ▶ Can your employees meet these demands?
- ▶ How do you know?

Ergonomic Assessment Tool Use

Type of Task	Ergonomic Assessment Tool
Lifting / Lowering	WISHA Lifting Calculator or NIOSH Lifting Equation
Upper Body Posture	Rapid Upper Limb Assessment (RULA)
Entire Body Posture	Rapid Entire Body Assessment (REBA)
Pushing / Pulling / Carrying	Snook Tables
Vibration	Hand-Arm Vibration Calculator

Job Task Assessment
Physical Demands Analysis
Pre-employment medicals

There are tools available to help you determine if the physical demands are too much.

Lifting Calculator

Step 1

Find the actual weight of objects the employee lifts.

Actual Weight = _____

Step 2

Determine the Unadjusted Weight Limit. Where are the employee's hands when they begin to lift or lower the object?

Mark that spot on the diagram below. The number in that box is the Unadjusted Weight Limit in pounds.



3kgs = 6lbs
5 kg = 11lbs
10kgs = 22lbs
20kgs = 44lbs
25kgs = 55lbs

Unadjusted Weight Limit = _____

Step 3

Find the Limit Reduction Modifier. Find out how many times the employee lifts per minute and the total number of hours per day spent lifting. Use this information to look up the Limit Reduction Modifier in the table above.

How many lifts per minute?	For how many hours per day?		
	1 hr or less	1 hr to 2 hrs	2 hrs or more
1 lift every 2-5 mins.	1	0.95	0.85
1 lift every min	0.95	0.9	0.75
2-3 lifts every min	0.9	0.85	0.65
4-5 lifts every min	0.85	0.7	0.45
6-7 lifts every min	0.75	0.5	0.25
8-9 lifts every min	0.6	0.35	0.15
10+ lifts every min	0.3	0.2	0

If the employee twists more than 45 degrees while lifting, reduce the Unadjusted Weight Limit by multiplying by 0.85.

This tool is used to calculate the maximum weight that most employees could lift/lower safely, given the variables of the task being evaluated.

To complete the assessment, you will need: Information about the job.

- Interview supervisors and workers, and
- Observe workers performing tasks.

If the job involves lifting of various objects with several different weights and/or from a few different locations, we recommend:

- 1) Analyze the two worst case lifts—the heaviest object lifted, and the lift performed in the most awkward posture. (Example: below knees, above shoulder, and/or farthest reach).
- 2) Analyze the most commonly performed lift, using the frequency and duration for all the lifting done in a typical workday.

Task variables needed to calculate the Weight Limit and Lifting Index when using the Lifting Calculator:

- Weight
- Vertical Hand Position
- Horizontal Hand Position
- Frequency
- Duration
- Twisting

See definitions on next page

Lifting Calculator

Step 4

Calculate the Weight Limit. Start by copying the unadjusted Weight Limit from Step 2

$$\begin{array}{r} \text{Unadjusted Weight Limit} \\ \times \text{Limit Reduction Multiplier} \\ \hline = \text{Weight Limit} \end{array}$$

Step 5

Is this a hazard? Compare the Weight Limit calculated in Step 4 with the Actual Weight lifted from Step 1. If the Actual Weight lifted is greater than the Weight Limit calculated, then the lifting is a MSI hazard and must be reduced below the hazard level or to the degree technologically and economically feasible.

Actual Weight = _____ Weight Limit = _____

Is corrective action required to reduce risk? YES NO

Plan to reduce risk of MSI Injury:

Definitions

1) **Weight**— Determine the actual Weight of the object being lifted. Often, you can obtain the weight of the load from labeling on the object or from company production or shipping records. If the weight of the load varies significantly, you should obtain the average and maximum weights lifted.

2) **Vertical Hand Position**— Determine the Vertical Hand Position of the employee's hands relative to the knees, waist, and shoulders of the worker as they begin to lift, lower, or place the object.

3) **Horizontal Hand Position**— Determine the Horizontal Hand Position by measuring the distance between the point projected on the floor directly below the mid-point of the hands grasping the object (load center), and the mid-point of a line between the toes.

4) **Frequency**— Determine the average number of lifts per minute of the lifting task being evaluated, this is the lifting frequency.

5) **Duration**— Determine the lifting duration as classified into one of three categories: 1) 1 hour or less, 2) 1–2 hours, or 3) 2 hours or more.

6) **Twisting**— Determine the degree to which the body is required to twist or turn during the lifting task. The twisting angle is the amount (in degrees) of trunk and shoulder rotation

Pillar 2 – Physiological Conditions

- ▶ Fatigue
- ▶ Stress
- ▶ Alcohol and drugs
- ▶ Workplace exposures



Fatigue

Fatigue is often thought of as the state of feeling very tired, weary or sleepy resulting from various sources such as insufficient sleep, prolonged mental or physical work, or extended periods of stress or anxiety.

UNDERSTANDING HOW FATIGUE IMPACTS YOUR COMPANY

DOES YOUR COMPANY HAVE THESE FATIGUE RISK FACTORS?

Fatigue hazards can be very high severity.
Fatigue risks can be mitigated.

Fatigue Risk Factors

- Safety sensitive work
- Driving operations or long commutes
- Long work shifts/rotations
- Irregular work hours like; dynamic shifts, on call/call outs, and seasonally high workloads
- Physically or mentally demanding work requirements
- Other relevant factors like: high stress, chaotic environments, extreme temperatures, work in remote regions, etc.
- Shift work

WHAT CAN YOUR COMPANY DO TO IMPROVE FATIGUE MANAGEMENT?

If yes, you have fatigue risk in your workplace.

IN-SCOPE SOLUTIONS CAN HELP YOUR COMPANY MITIGATE THE RISKS.

Are you effectively managing those risks?

Existing Fatigue Controls

1. Does your organization have risk specific fatigue related policies or procedures?
YES NO
2. Has your company made efforts to optimize scheduling to reduce worker fatigue?
YES NO
3. Are senior leaders aware of the business impact fatigue has on your organization (what it's costing)?
YES NO
4. Does your organization currently have adequate fatigue related training for workers, supervisors, managers, and other stakeholders (dispatchers, schedulers, etc.)?
YES NO
5. Is your organization aware of its specific fatigue related risk factors? Have you conducted a formal fatigue risk assessment?
YES NO

To learn more visit our Resources page at www.in-scope.ca.

Stress

- ▶ As stated by the Canadian Mental Health Association:

Stress is a reaction to a situation – it isn't about the actual situation.

- ▶ We usually feel stressed when we think that the demands of the situation are greater than our resources to deal with that situation.

Coping Skills

Talk to someone

Drugs and Alcohol

- ▶ Typically, the most widely known issue for Fit for duty.
- ▶ Different drugs have different impacts.
- ▶ More dangerous drugs circulating.

Drug testing

EFAP

		 Canadian Centre on Substance Abuse <small>Partnership, Knowledge, Change.</small>				<h2>Effects of Drugs</h2> <h3>on the Body and Driving</h3>			
		Marijuana	Stimulants <small>cocaine, methamphetamine</small>	Opioids <small>oxycodone, heroine, fentanyl</small>	Sedatives <small>benzodiazepines, depressants, sleep medications</small>				
									
Street Name		pot, weed	coke, meth	oxy, sticky, smack	downers, benzos				
Effects on the BODY and BRAIN		<ul style="list-style-type: none"> • Impairs coordination & balance • Reddens eyes & dilates pupils • Distorts perception of time & space 	<ul style="list-style-type: none"> • Dilates pupils • Causes body shakes & increases talkativeness • Causes restlessness, agitation & nervousness 	<ul style="list-style-type: none"> • Constricts pupils & causes droopy eyelids • Lowers heart rate & breathing • Causes drowsiness 	<ul style="list-style-type: none"> • Causes jerky eye movements & slurred speech • Impairs judgement & lowers inhibitions • Confuses & disorients 				
Effects on DRIVING		<ul style="list-style-type: none"> • Slows reaction time • Impairs short-term memory & concentration • Causes driver to vary speed & to wander 	<ul style="list-style-type: none"> • Reduces driver balance and coordination • Reduces impulse control • Increases risk taking 	<ul style="list-style-type: none"> • Slows reaction time • Reduces ability to divide attention & follow instructions • Slows driving 	<ul style="list-style-type: none"> • Impairs motor coordination & slows reaction time • Decreases attentiveness & ability to divide attention 				

Workplace Exposures



- ▶ There are a variety of exposure related hazards that exist in our workplaces today including:
 - ▶ Chemical Exposures
 - ▶ Biological Exposures
 - ▶ Physical Health Hazards (i.e., Radiation, Noise, Asbestos, etc)

Education

Risk Assessments

Pillar 3 – Psychological Conditions

- ▶ Violence and Harassment
- ▶ Distractions
- ▶ Human Error

The Mental Health Commission of Canada states that about 30 per cent of short- and long-term disability claims in the country are attributed to mental health problems and illnesses. The overall economic burden caused by mental illness in Canada totals about \$51-billion each year, and a staggering \$20-billion of that stems from workplace losses. A study by the MHCC estimated that the cumulative cost of mental health over the next 30 years is expected to be more than \$2.3-trillion.



Violence and Harassment

There is no place for violence or harassment in today's workplace, but it still happens.

What is workplace harassment?

The regulation defines workplace harassment as any behaviour that is known or should be expected to be known to be unwelcome that would demean, embarrass, humiliate, annoy, alarm or threaten an employee's health and safety. This can be on a one-time or repeated basis, and includes sexual harassment.

In every workplace, however, conflicts can arise that may be unpleasant, but do not escalate to the point of bullying or harassment. Differences of opinion or minor disagreements are not generally considered to be workplace harassment.

What is workplace violence?

Workplace violence is defined as the attempted or actual use of physical force against an employee, or any threatening statement or behaviour that gives an employee reasonable cause to believe that physical force will be used against the employee, and includes sexual violence, intimate partner violence* and domestic violence

Distractions



- ▶ Traditionally we talk about distractions being external like cell phones or headphones.
- ▶ NB Power created a campaign on wellness based on research of the 40 – 10 – 50 model

Look for signs of
distraction

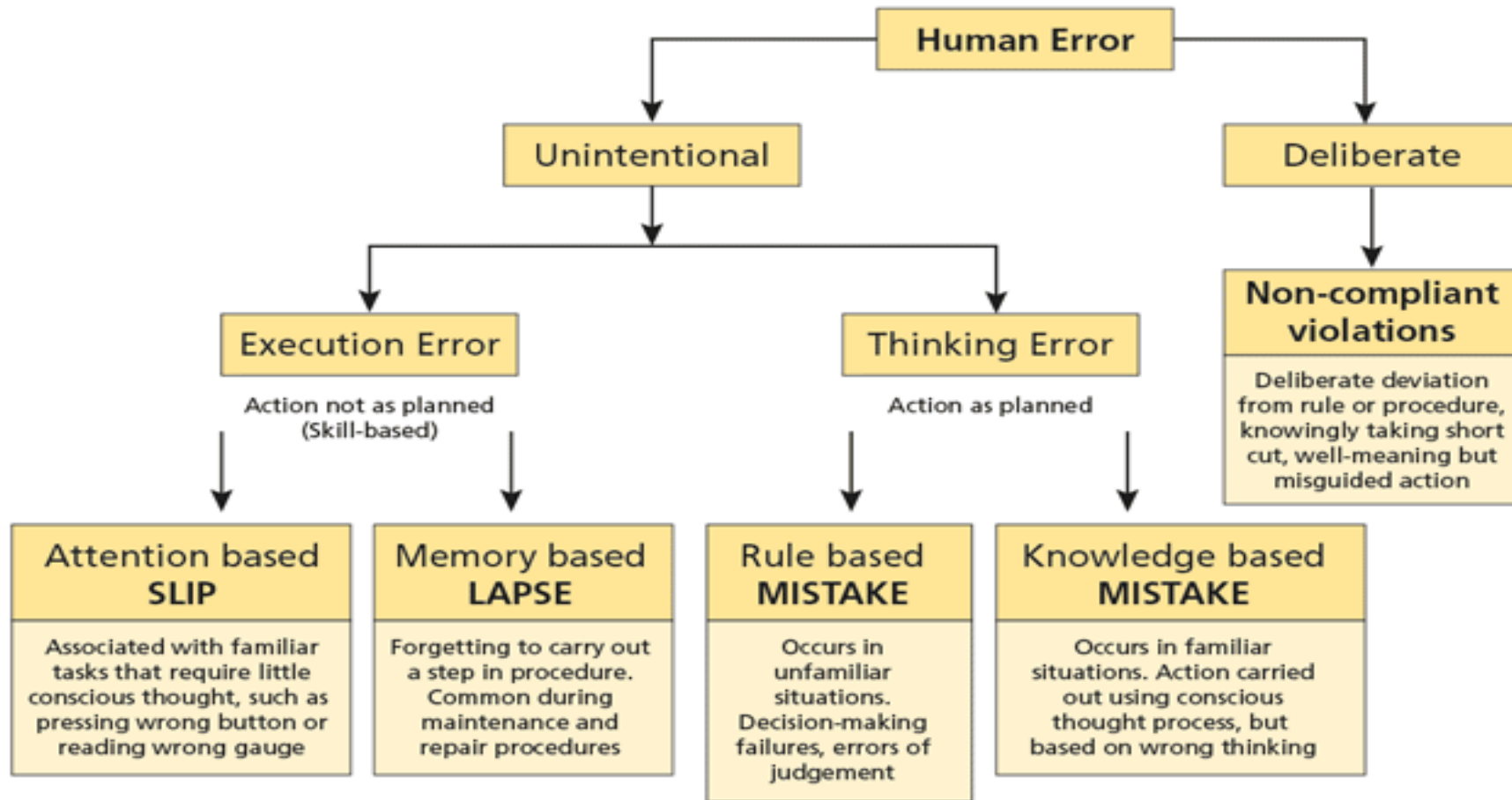
“Up your 10”



Human Error

- ▶ There are different types of Human Error:
 - ▶ Skill Based or Action / Execution Errors – Slips and Lapses.
 - ▶ Decision Based or Thinking Errors – Rule Based, or Knowledge Based.
 - ▶ Non-compliance – Routine, Situational or Exceptional.

Human Error Model



Driving to work

Forgetting to pick up milk

Misapplication of a good rule or applying a bad rule

Unfamiliar task or equipment

Human Error

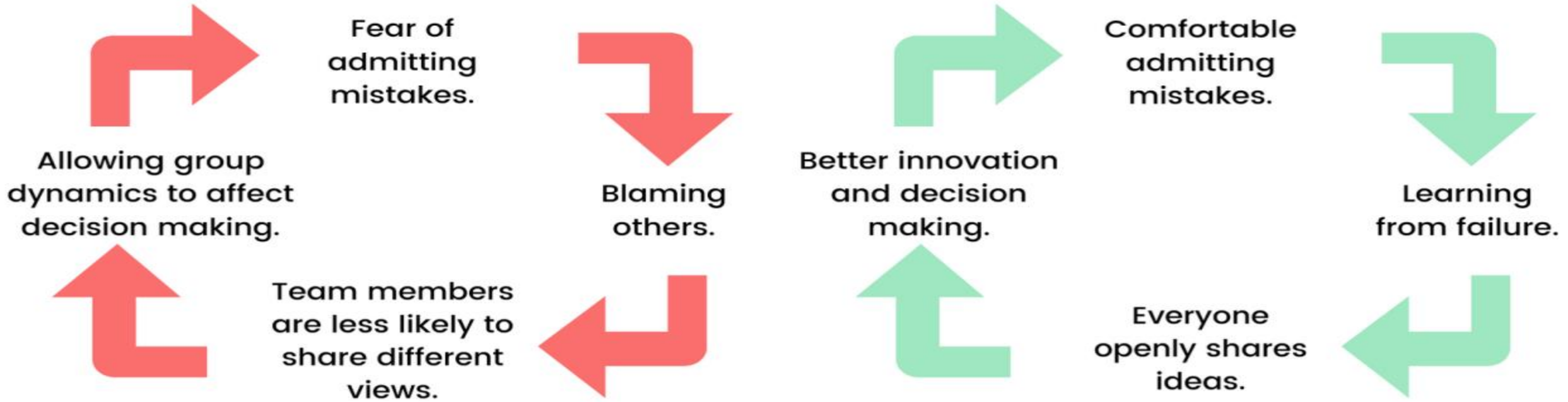
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Action Errors are not intended, so training will not help

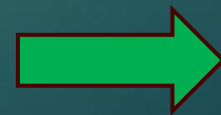
Diagnostic tools and Organizational Learning

PSYCHOLOGICAL DANGER

PSYCHOLOGICAL SAFETY

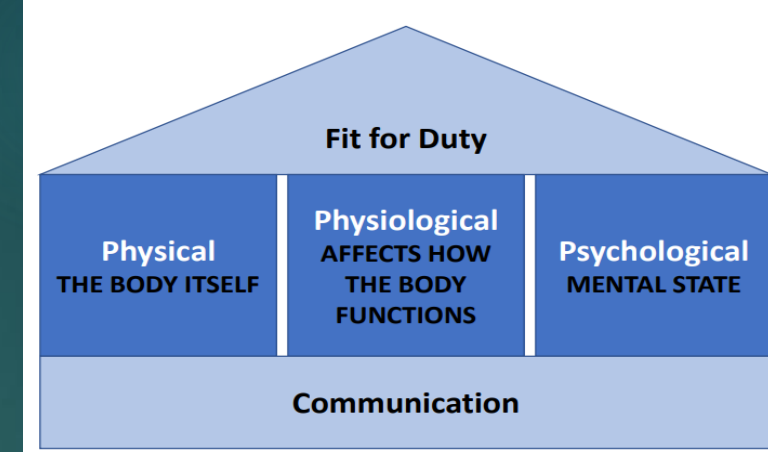


Where is your organization



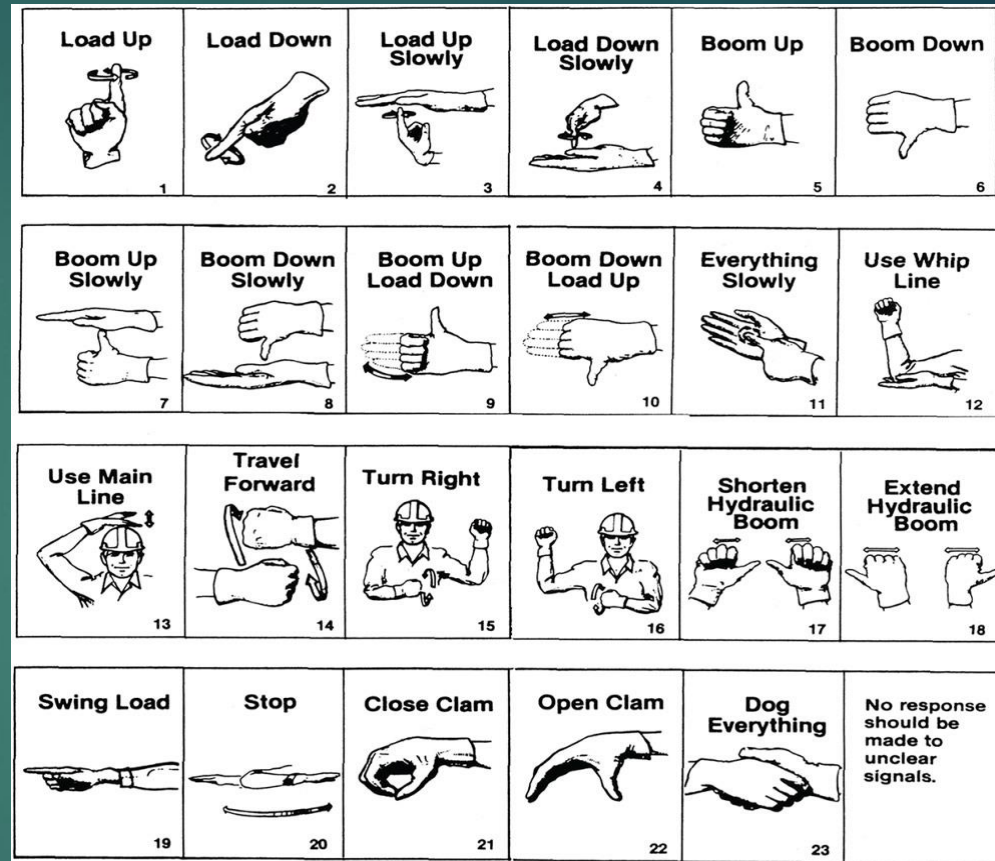
Communication

- ▶ Communication is the foundation.
- ▶ Often seen as a causal factor in many safety incidents.
- ▶ Communication attributes:
 - ▶ Ability to Communicate.
 - ▶ Common Language and Understanding.
 - ▶ Signs and Symptoms



Ability to Communicate

- ▶ Language barriers.
- ▶ Written communication.
- ▶ Hand Signals.



Understand where barriers exist

Education on signals

Common Language

A/C

▶ Industry Jargon and Acronyms

Ground

▶ Language differences

Pipe



Understand where barriers
exist

Teach common terms

Signs and Symptoms

- ▶ Do you know what to look for in an unfit worker?
- ▶ Do you have a plan when someone is found to be unfit?

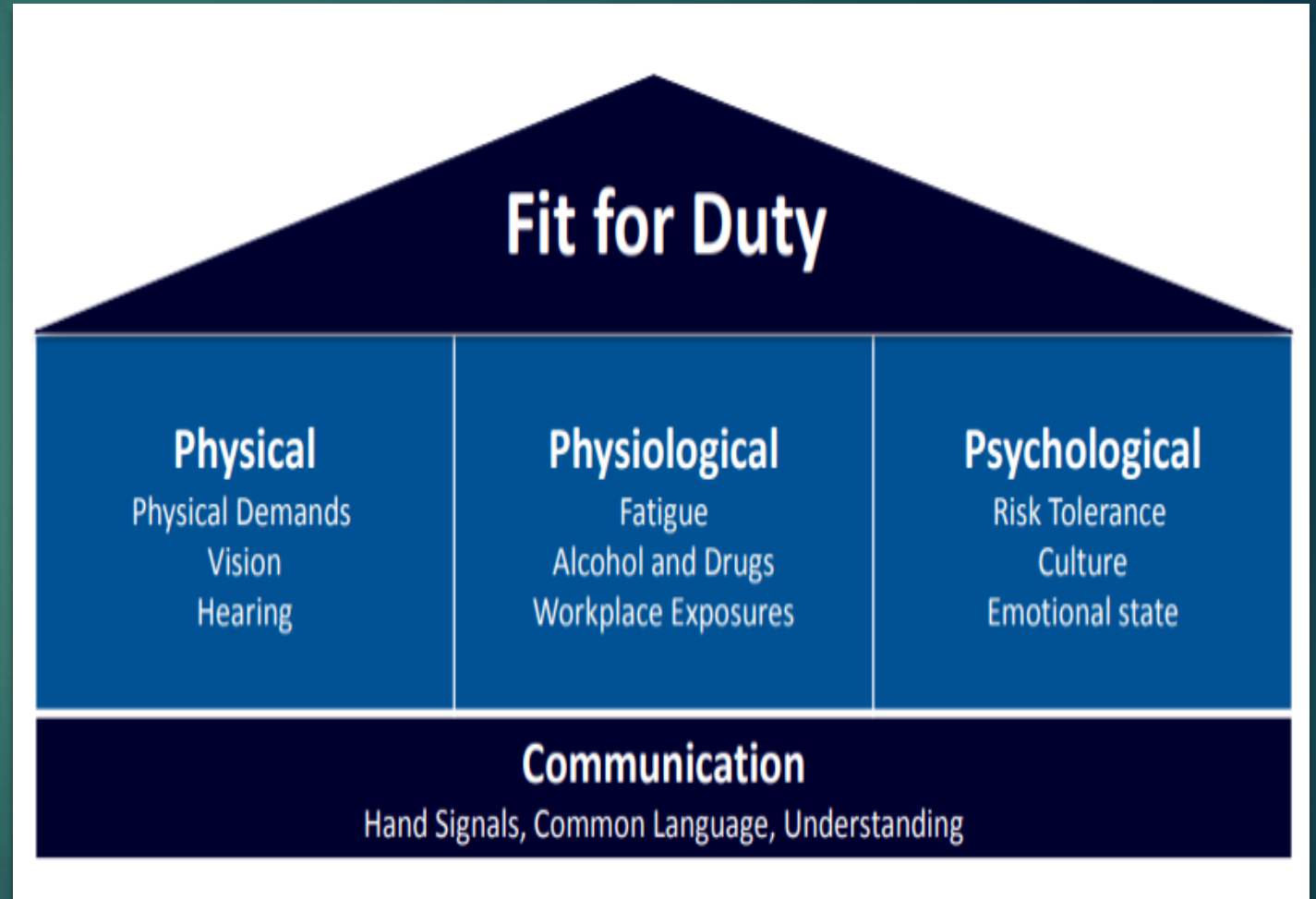


Understand what
impairment looks like

Have a plan

Fit for duty “house model”

- ▶ Fit for duty is more than Drugs and Alcohol.
- ▶ Understand where you have these hazards.
- ▶ Develop a plan to address the conditions.



Risk Perception and Tolerance Model

Exposure

IDENTIFY the Hazard
Do I See It?

PERCEIVE the Risk
Do I Understand it?

The DECISION
Do I Accept it?

The hazard is NOT RECOGNIZED

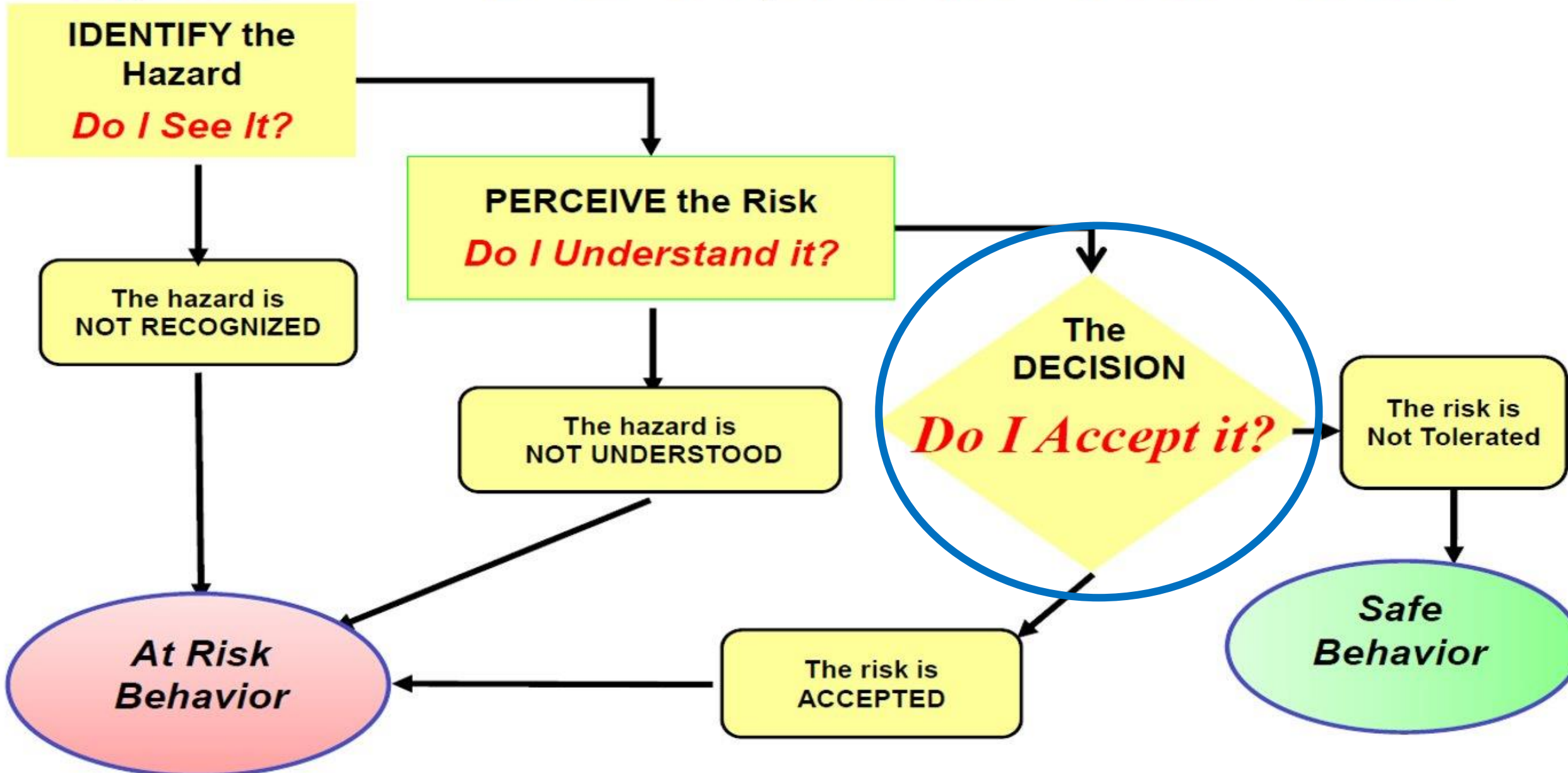
The hazard is NOT UNDERSTOOD

The risk is Not Tolerated

At Risk Behavior

The risk is ACCEPTED

Safe Behavior



Thank You

Questions, comments,
thoughts

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References

- ▶ <https://ohguides.acoem.org/04-fitness-for-duty-introduction/> - AMERICAN COLLEGE OF OCCUPATIONAL AND ENVIRONMENTAL MEDICINE.
- ▶ <https://www.energysafetycanada.com/Resource/Guidelines-Reports/Fit-For-Duty> - ENERGY SAFETY CANADA
- ▶ <https://www.safemanitoba.com/News/Documents/B4%20-%20Fit%20for%20Duty%20Physically,%20Mentally%20and%20Emotionally%20Ready%20to%20Do%20Your%20Job%20%20-%20Michael%20Pogorzelec.pdf> – WORKSAFE MANITOBA PRESENTATION ON FIT FOR DUTY
- ▶ <https://www.ccohs.ca/oshanswers/psychosocial/fatigue.html> - CANADIAN CENTER FOR OCCUPATIONAL HEALTH AND SAFETY WEBSITE
- ▶ <https://cmha.ca/brochure/stress/> - CANADIAN MENTAL HEALTH ASSOCIATION
- ▶ <https://in-scope.ca/wp-content/uploads/2021/10/Understanding-How-Fatigue-Impacts-Your-Workpla.pdf> - IN-SCOPE PRESENTATION ON FATIGUE
- ▶ Managing Mental Health Risk and Supporting Mental Health Course – UNB College of Extended Learning – Dr. Bill Howatt
- ▶ NB Power presentation – You don't need a better hard hat – Duff Boyd and Dr. Shelly Parker
- ▶ Distraction Video – WorkSafeBC
- ▶ Human Error Model – James Reason – 1991
- ▶ <https://www.linkedin.com/pulse/my-top-5-tips-build-psychological-safety-kate-cousens-she-her-> 5 Top Tips to build Psychological Safety – Kate Cousens - LinkedIn