Risk Perception

Purpose

The purpose of this course is to ensure that participants prevent injuries to themselves or others, damaged to the environment or facilities; By being properly trained in the Risk Perception methodology.

Objectives

- ✓ Differentiate the concepts of Danger and Risk
- ✓ Explain what Risk Perception is
- ✓ Identify the steps for risk perception
- ✓ Determine the relationship between Risk Perception and Safe Behavior.

What is a Danger

Danger

It is the source or everything that has the power to do harm.

Example:
- ✓ Hot material
- ✓ Suspended load
- ✓ Electricity
- ✓ Gases
- ✓ Equipment on the move
- ✓ Biowaste
- ✓ Structure in poor condition
- ✓ Damaged surfaces

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What is a Risk

Risk

Human exposure to a danger.

Example:

✓ Burn
✓ Fall
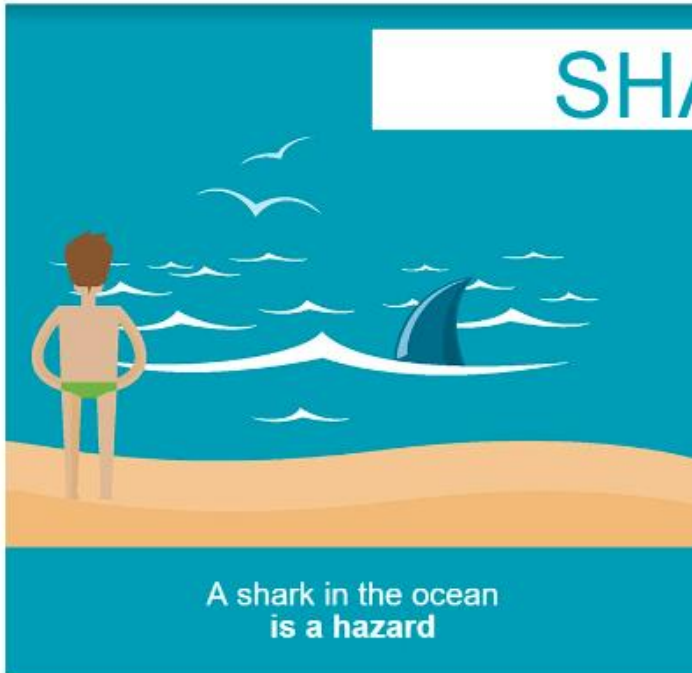✓ Court
✓ Shocks
✓ Entrapment
✓ Intoxication
✓ Death
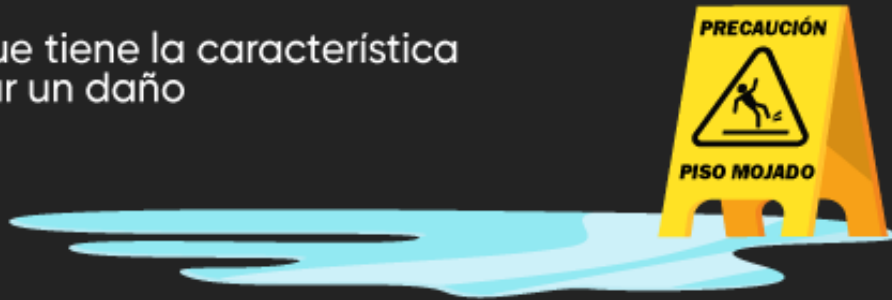
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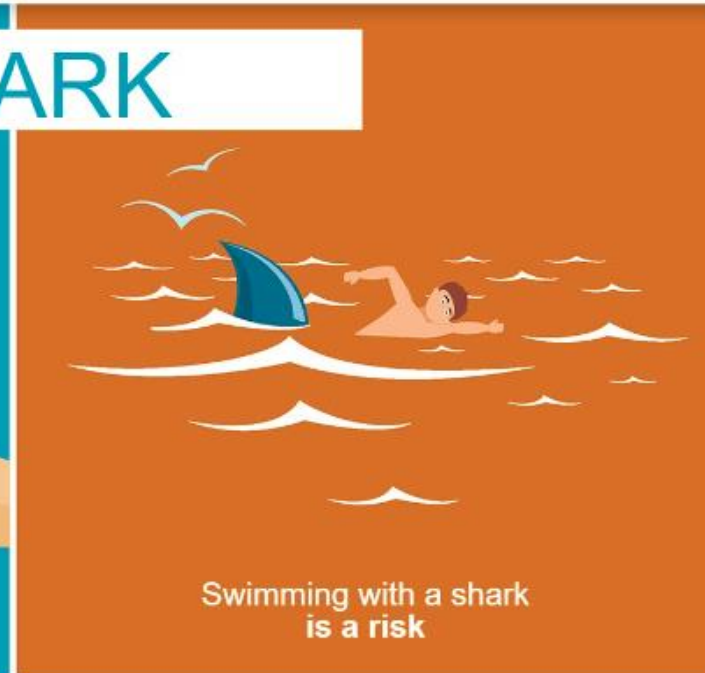
The contact that the human establishes with his environment is mediated by his senses.

Vision	Smell	Audition	Taste	Tact

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This process of receiving and converting external stimulus is called sensation. And the process of attributing meanings to the information received is called perception.
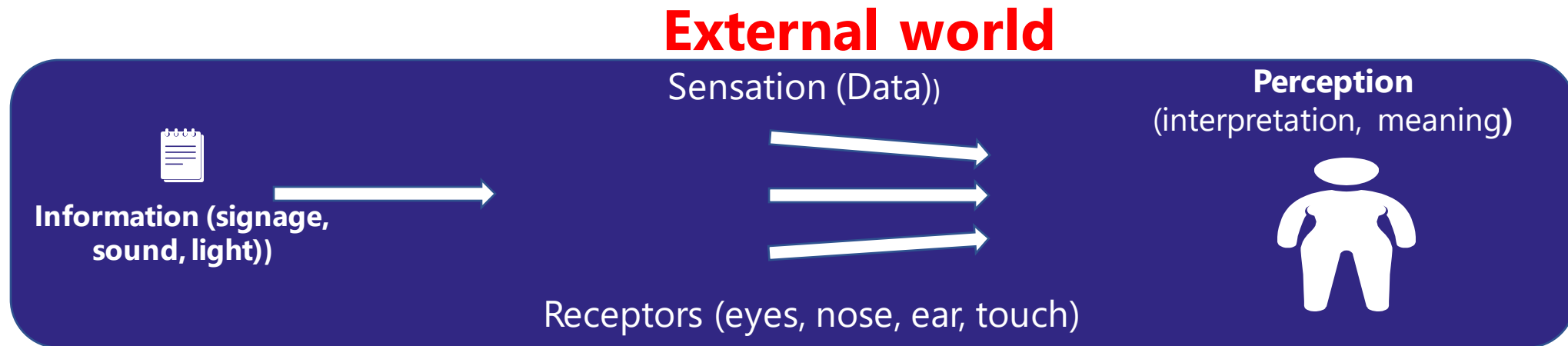

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Risk Perception

Perception is a psychological process by which people organize their sensory impressions and, interpreting them, seek to make sense of the environment, also give meaning and value to them depending on their experiences and learning.

External world

Sensation (Data))

Perception
(interpretation, meaning**)**

Information (signage, sound, light))

Receptors (eyes, nose, ear, touch)

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Risk Perception

It is the ability to identify hazards and analyze risks
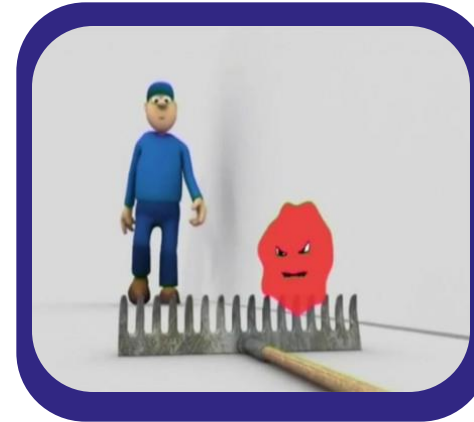
Perception Activity

Observe the figure and verify how the perception varies.
 Cups or people talking?

Risk Perception

- Risk perception refers to the ability of people to received and attribute meaning to the risks present in their daily lives, whether at work, on their moves, at home. Because it is a process that suffers interference from health, knowledge, attention, emotional state, people's ability to perceive risk varies throughout their lives. That makes the actual risk different from the risk that was perceived by that person, which in workplace safety can mean great possibility of accidents due to careless exposure.

Risk Perception

The safety professional cannot improve safety much if people do not increase their own perception of risk in different situations, and do not reduce their tolerance of risky situations.

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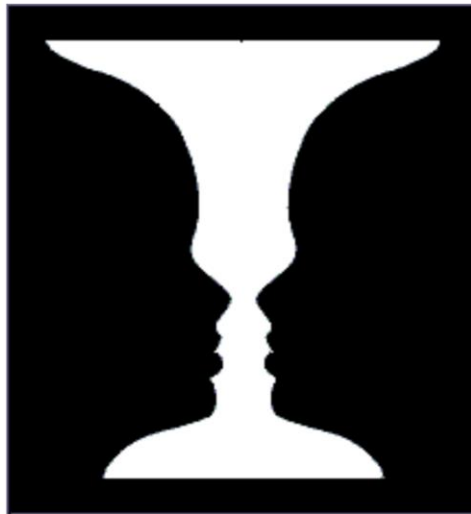
Risk Percepción

The decision process that must be created from observation depends both on their work culture, their knowledge about the system, as well as the cognitive characteristics of the individual. All the time these factors influence our perception of risks:
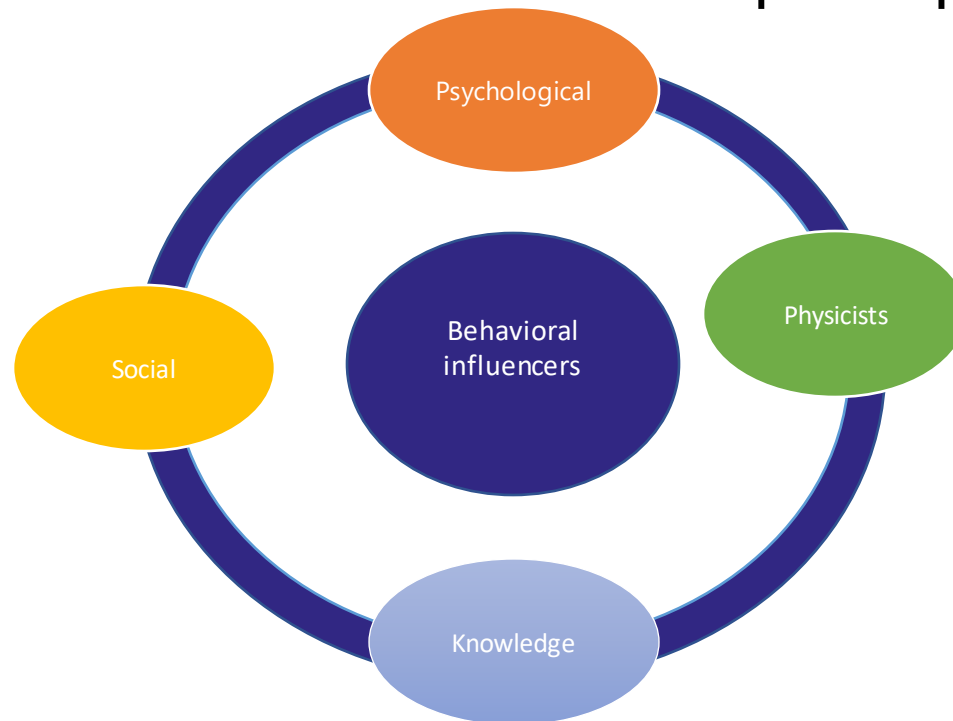
Influencers

What is necessary to perceive risks?

✓**Be focused** - Direct your focus in order to look for the dangers you previously identified..
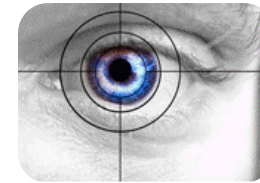
✓**Ability** - Have the knowledge of the process, to have a reference framework and to be able to identify the risks..

✓**Will** - Only achieved if the person is convinced and committed..

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Safety Behavior Steps

Identify the hazard

Perceiving risk

Choosing safety behavior

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Attitudes and actions that we need to avoid

Haste	**improvisation**
Exceptions	**Assumptions**

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Haste

The rush produces risk, because in this way we forget or skip (consciously) stages of correct procedure. "Shortcuts should not be tolerated", shortcuts are open to error and accidents.

Improvisation

It is very common that, due to laziness or lack of resources, improvisation produces risks. Any change must be analyzed in terms of the risks arising from it.

✓Improper devices and tools are used.

✓Materials are used for purposes that do not correspond.

Exceptions

Nothing should justify exceptions, because the accident will not happen just this time. It corresponds to deviations due to attitudes such as:

✓ "I'm doing it, just this time.."

✓ In this case we can set this to the aside...."

Assumptions

We assume information, knowledge, characteristics, among others, creating intolerable risks. Assuming something to be true, without verifying it, is a very dangerous attitude..

✓ "He must have already disconnected the power. I can start now..."

✓ "I know how to do it too, it's easy..."

✓ "If it was dangerous would have a warning..."

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Cultural aspects that affect perception

Attitudes to risks:

✓"Saint Thomas" (if I don't see it, I don't believe it)

✓ Occurrence of "almost never"

✓Belief of "Self-exclusion"

✓Technological failure

" Saint Thomas" (If don´t see it, I don´t believe it)

✓ People do not "see" the risks if they do not witness the associated damages, for example:

- ✓ There is NO noise in the company, until the medical service shows hearing loss.
- ✓ Seeing a vehicle destroyed (accidented), makes the person "remember" or "believe" that driving on roads/highway is risky...
- ✓ For these people, only the concrete presence of the damage "validates" the risk.

Occurrence Of "almost never"

✓ It is necessary that before a similar event has occurred somewhere to give importance to that danger, for example:

  ✓ If no related "cause" is found, there is no risk.

  ✓ The risk is "valid" by a known fact. That way to be "considered" as "possible, before that it will be despised."

Mutual alert?

✓What is mutual alert?

What is mutual alert? It is a simple way to avoid many accidents, especially in areas of high movement and with several activities occurring simultaneously. It consists of a notice that everyone can give to a colleague or anyone who has entered their work area
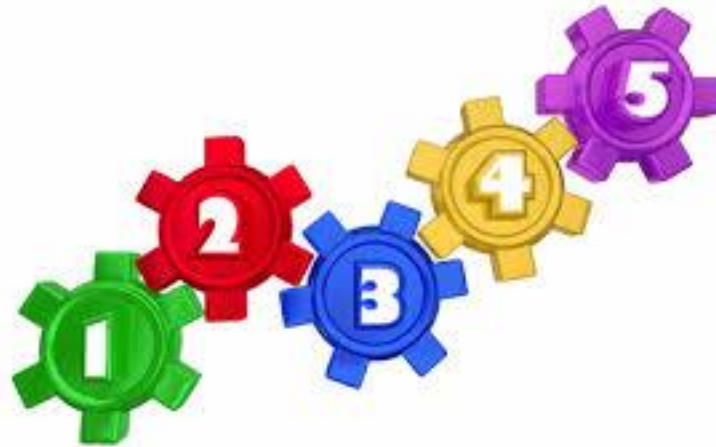

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Mutual alert?

✓The warning can be of any risk of the area that the person might not perceive, for example: "

✓Careful, there is work upstairs. Tool can fall"

✓ "! I'm hoisting the load!"

✓"! The vehicle is going to back up!"

✓"Watch out for the step!"

The 5 stepts to risk perception

The 5 steps to risk perception

1. Think about the task
2. Identify hazards
3. Assess risks
4. Define and implement controls
5. Get the job done safely

1.Think about the task

✓Some questions that help you carry out the first step are:

✓Did you understand the work to be done?

✓Did you receive any necessary information?

✓Is there any procedure to follow?

✓Are the tools and equipment available adequate?

✓ Do you need permission to perform this task?

✓ Will any other systems or activities be affected?

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1.Think about the task

- Can I access securely?
- Can something unforeseen happen?
- Do I need to perform blocks?
- Can I harm any other equipment or system?

2.Identify hazards

✓ Difference and relationship between **Seeing, Looking and Observing:**

   ✓ **See:** Sense of sight. There is no conscious attention.

   ✓ **Look:** Fix your eyes attentively on the lake. Have some purpose in what is executed. Observe:

   ✓ **Observing** is the initial step of any mental process, it is the gateway of the external world to ourselves. To learn to observe daily activities in samples, you have to stop seeing and start looking.

2.Identify hazard

✓ Observing before any task or action is the basis to begin to exercise **Perception**, and therefore this learning is basic for everyone, with the aim of achieving a SAFETY BEHAVIOR

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2.Identify hazards

✓ Safety behavior to identify hazards:

✓ Look Up, Look Down

✓ Look sideways

✓ Look back, Look straight ahead

✓ Look inside

3.Assessed the risks

✓What can happen if…..?
- ✓Fails, breaks
- ✓ Empty, replaced
- ✓Rolls, hardens
- ✓Catches fire
- ✓ It falls, closes

3.Assessed the risks

✓ What can happen if it is…..?
   - ✓ Very heavy/light
   - ✓ Very small/large
   - ✓ Very hot/cold
   - ✓ Energized
   - ✓ Pressurized
   - ✓ Toxic
   - ✓ Slippery

3.Assessed the risks

✓What can happen if people....?
 ✓They don't understand
 ✓ They don't.
 ✓They are wrong
 ✓They need help

The biggest mistake is thinking that you already know everything.

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4.Defines and implements controls

✓ Control Implementation Process We can apply some of the following points:

   ✓ You can eliminate or replace the task: We must analyze if the task can be done in some other way where we are no longer exposed to the risks of the task.

   ✓ Safety or engineering design: Design that allows us to control or minimize risk, Example: Guards, work platforms, implementation of tools, etc.

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4.Defines and implements controls

- ✓ administrative: Establish safety procedures or regulations for the task, Example: MOST, PTC, Specific security procedures.
- ✓ Personal protective equipment. (PPE)

4.Defines and implements controls

✓Some questions that help you carry out this step are:

   ✓Are all the necessary PPE items available?

   ✓Is it necessary to place some fencing, if so, was it done in the best way?

   ✓Were the Lockout Tagout carried out effectively?

   ✓ Do all participants know the risks involved in the task?

   ✓Are all the participants well to carry out the activity?

Get the job done safely

✓ To get the job done safely:

    ✓ Pay attention to detail

    ✓ See the whole scenario

    ✓ Take care of yourself and your colleagues

    ✓ If the work is not secure, stop the task!, return to step 4: "Define and implement controls".

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Get the work done as it was the first time.

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Thank you!