Hazard Identification or Complacency??
Which is the Bigger Problem??

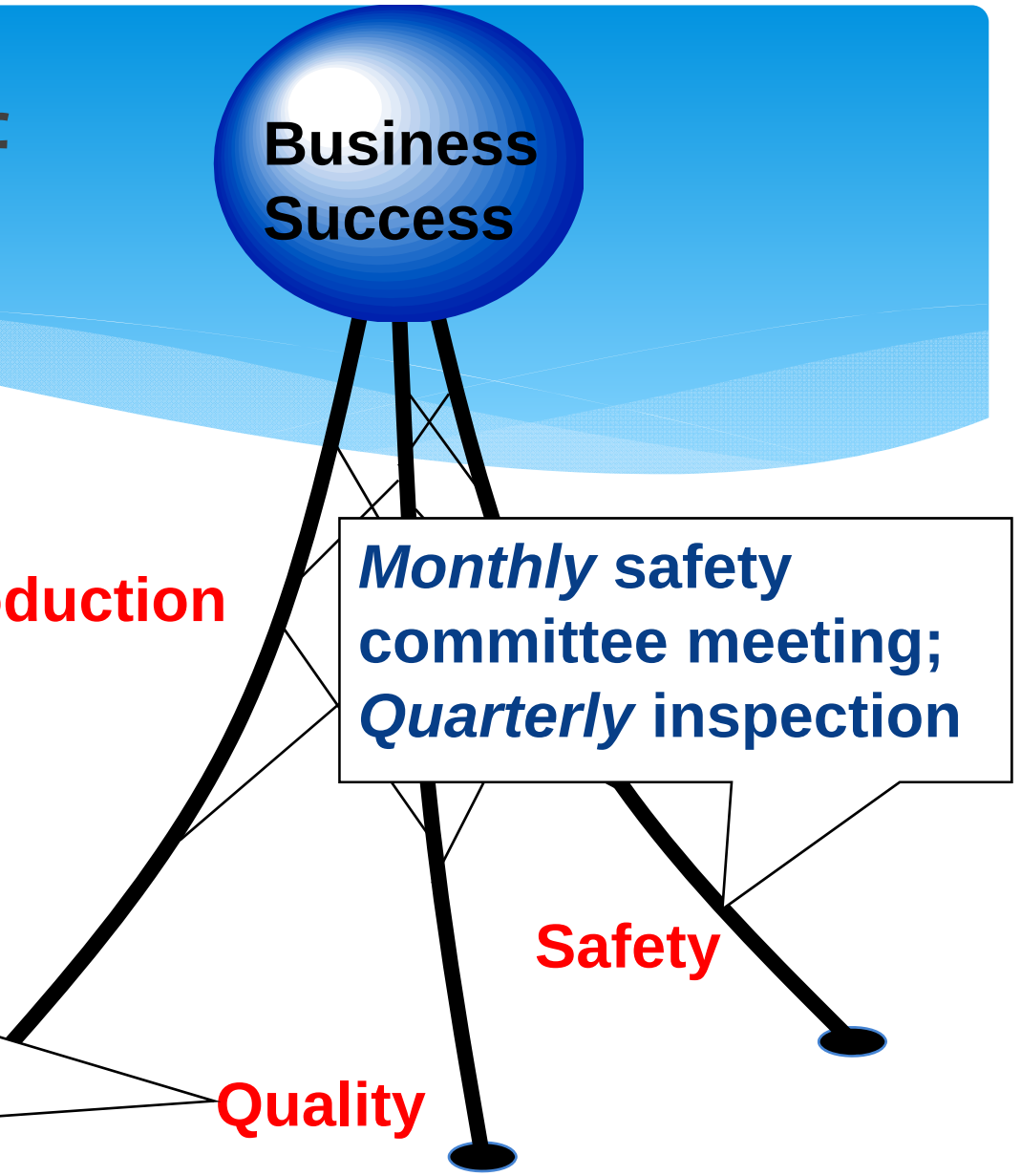
Speakers:

Brett James & Reginald Whitaker, CSP
Oklahoma Steel & Wire

“No matter how good it might look -- Sometimes it just doesn’t pay to be on the ground floor of a new idea”

Murphy’s New & Improved Two Story Outhouse

Three Concerns of Every Business



Need to make Highest Quality Product at LOWEST per Unit Cost in the SAFEST possible manner!!!!

Known Hazards We Should Know OSHA Compliance

* **GHS-Getting SDS's, Proper Labeling, etc.**
* **Severe Injury Reporting to OSHA- Fatalities (8hr), Inpatient Hospitalizations (24hr), Amputations (24hr), Loss of eye(s) (24hr).**
* **Recording Keeping- OSHA Logs, Up to Date.**
* **Silica Dust Standard- 50 micrograms per cubic meter (ug/m3)**
* **ALL other compliance standards**

Unknown Hazard: Incident Investigation

* Fix the cause, don't lay the blame
* When a incident or accident happens the most important thing is taking care of the injured employee FIRST..
* If we are going to prevent accidents, we need to investigate the incidents.

Who, When , How, and What

* Who should conduct the investigation?
  * Supervisor, Employees, Safety Personal & Committee
* When incident investigations needs to be completed?
  * ASAP after the incident. (Employee First)
* How the investigation will be conducted?
  * Most use forms(fill in blanks)
* What will be done with the findings?
  * Reviewed by management team, safety committee, etc.
  * **Follow up on corrective actions**
  * **Analyze Results**

Unsafe Acts / Unsafe Conditions

* **Unsafe Acts – Cause 90% of ALL incidents**
* **Unsafe Conditions- Cause 10% of ALL incidents**

* **Therefore Unsafe Acts must be investigated to find if cause is hazard identification and/or complacency.**

Hazard Identification or Complacency??

Let's Look at each one –

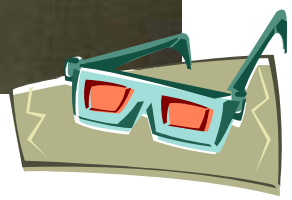
then we can try to answer the question.

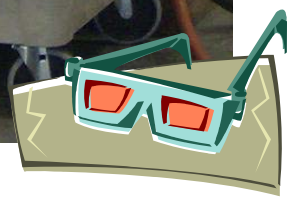
Definition of HAZARD

* 1. : A **hazard** is any source of potential damage, harm or adverse health effects on something or someone under certain conditions at work.
* **A common way to classify hazards is by category:**
  * **biological** - bacteria, viruses, insects, plants, birds, animals, and humans, etc.,
  * **chemical** - depends on the physical, chemical and toxic properties of the chemical.
  * **ergonomic** - repetitive movements, improper set up of workstation, etc.,
  * **physical** - radiation, magnetic fields, pressure extremes (high pressure or vacuum), noise, etc.,
  * **psychosocial** - stress, violence, etc.,
  * **safety** - slipping/tripping hazards, inappropriate machine guarding, equipment malfunctions or breakdowns


CINTAS
US-4517
HT TP
SIEMENS


RAYMOND



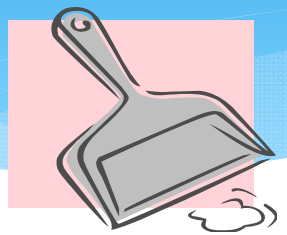



EMERGENCY STOP
CYCLE
ST
SP
CAUTION
THIS MACHINE
MUST BE
LOCKED OUT
PRIOR TO
SERVICING

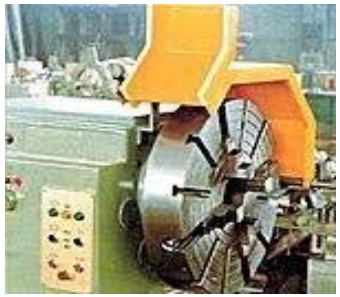

EYE WASH
EYE WASH

Hazard ID -- First, Last and Always! (Because what you don't know CAN HURT YOU!!!)

Hazard Controls

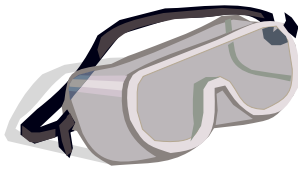


- **Good Housekeeping** – **Get rid of the unnecessary clutter, clean and organize; keep area picked up, swept.**



- **Safe Equipment – Ensure guards are in place, machines are operating correctly, safety devices have not been bypassed.**

* **Safe Work Practices** – Follow the safe operating procedures that have been specified; no short-cuts.



- **Proper PPE** – **Make sure that you (and those around you) have and use the right safety equipment to prevent injury.**

Complacency

Some people have their head in the sand and ignore what is happening around them, what's changed, what NEW hazards are there…

Definition of COMPLACENCY.

* 1. : self-satisfaction especially when accompanied by unawareness of actual dangers or deficiencies.
* 2. : an instance of usually unaware or uninformed self-satisfaction.

“Complacency is a sword of two edges. One edge kills hard earned successes while the other end stops future glories. Complacency is a murderer and a barrier!”

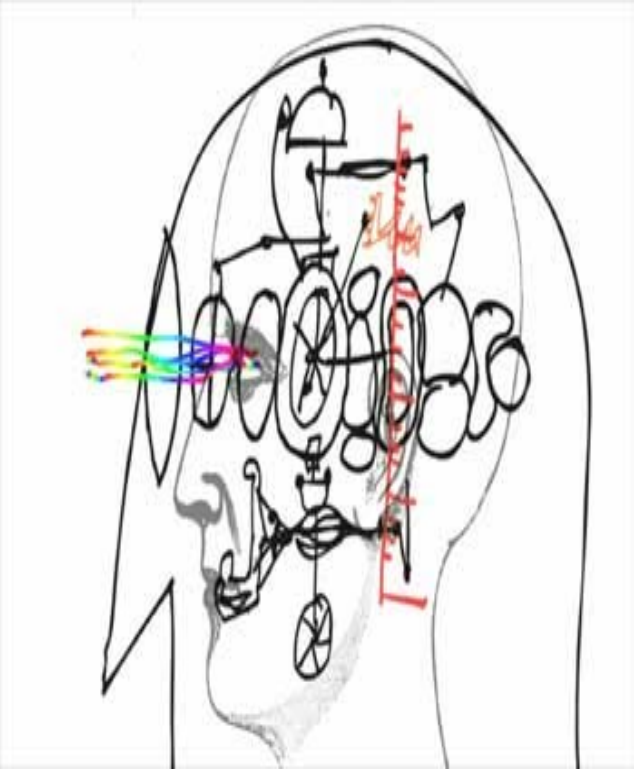
— Israelmore Ayivor, *The Great Hand Book of Quotes*

Complacency

* No matter how vigilant we are, as time goes by with no problems occurring, we become complacent and let our guard down.
* The more we do the same thing over and over (only if nothing changes)–the more COMPLACENT we become!
* Complacency is a natural function of the brain.
* The brain is designed to automate repetitive behavior.
* Complacency is ***not*** the result of apathy, carelessness, or a flaw in your personality; **it is the way the brain functions.**

Complacency

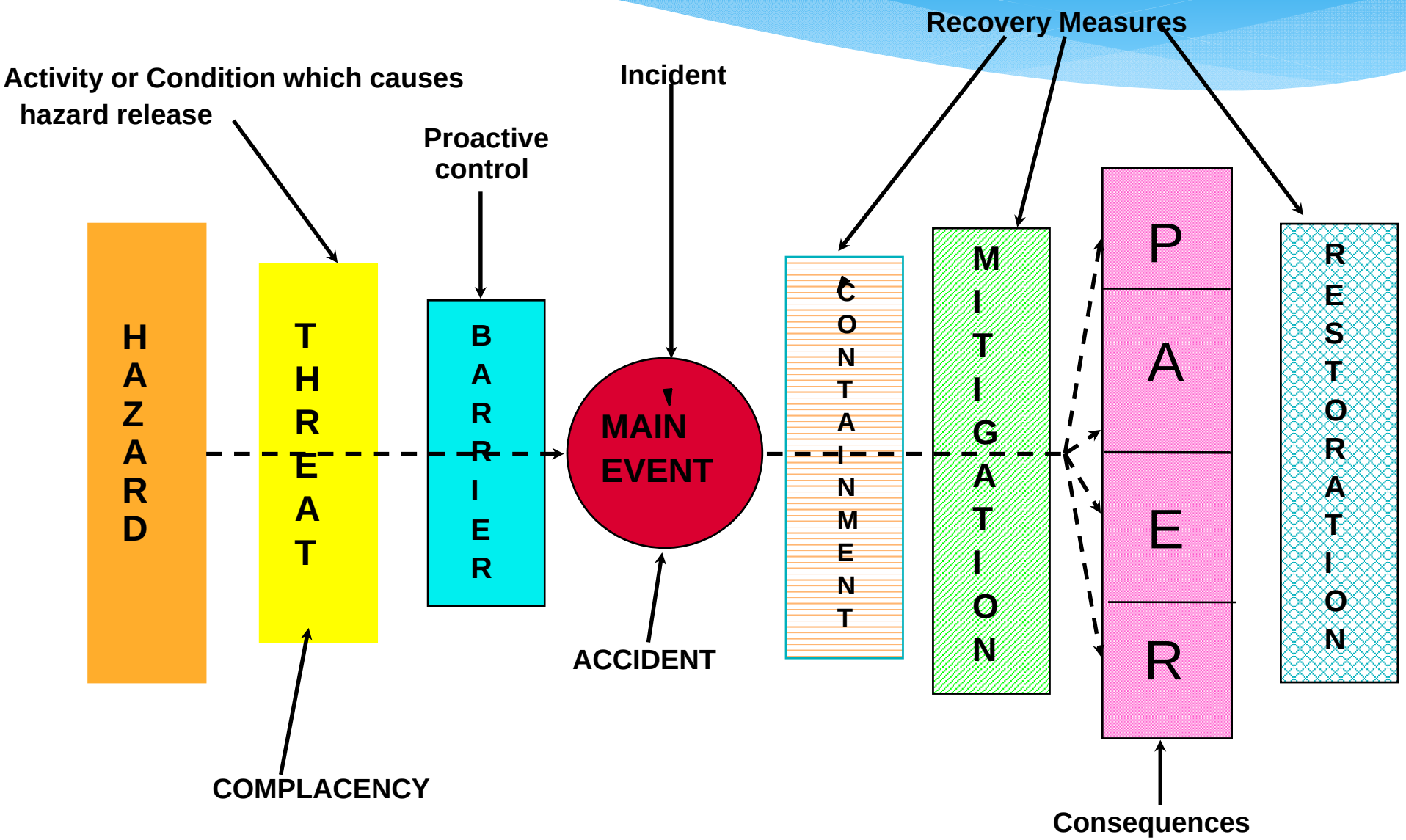
* The brain constantly and unconsciously scans the environment for signs of danger.
* We notice and respond to what is unique, unusual, or threatening.
* However, repeated exposure to situations, even if they are potentially dangerous, ***dulls*** our defense mechanism and our awareness.



Managing Hazard Identification & Complacency

To ensure that accidents don't happen:

- The hazards inherent in the operations must identified and assessed and be fully understood at ALL levels of the organization
- Arrangements are in place to control these hazards and to deal with the consequences should the need arise
- The necessary information, training, auditing and improvement process are in place


Recovery Measures
Activity or Condition which causes hazard release
Incident
Proactive control
HAZARD
THREAT
BARRIER
MAIN EVENT
CONTAINMENT
MITIGATION
P
A
E
R
RESTORATION
ACCIDENT
COMPLACENCY
Consequences

Escalation Factors - definition

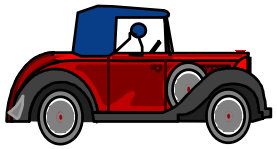
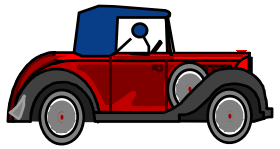
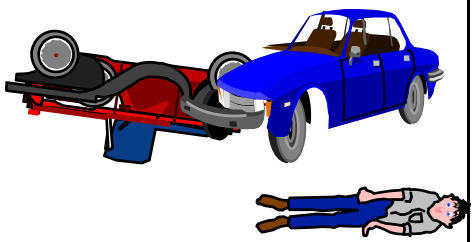
Escalation Factors are defined as:

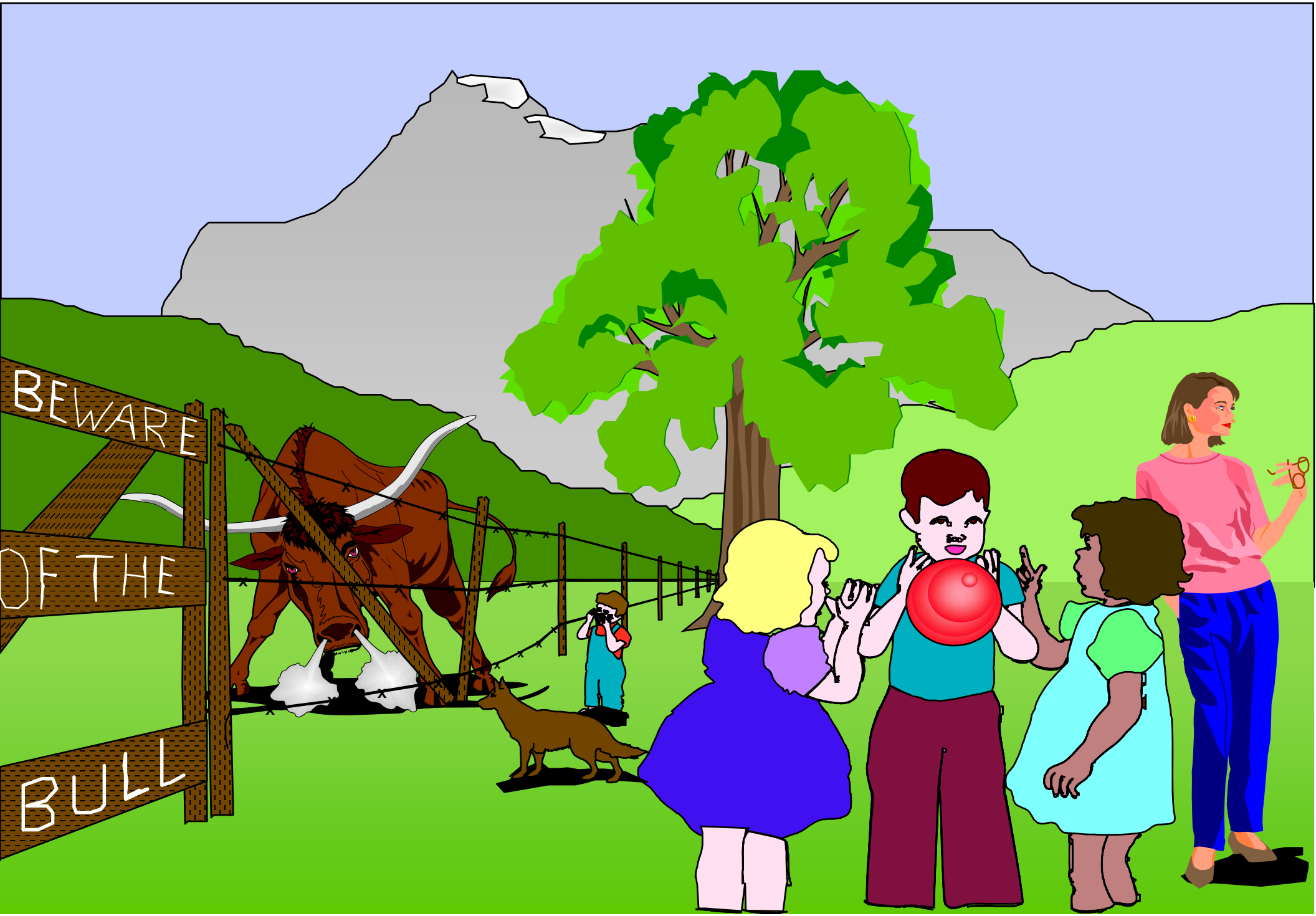
Conditions that lead to increased risk due to loss of barriers or loss of recovery measures especially life saving or mitigating capabilities

- **Abnormal operating condition e.g. critical standby equipment is under maintenance during an emergency**
- **Plant operating outside the design capacities**
- **Extreme environmental conditions - weather**
- **Incorrect operation of the plant due to unavailability of updated operating procedures**
- **Human error due to lack of competence or ineffective training**

Examples Of Identifying & Managing Safety and Health Risk

Examples Of Identifying & Managing Safety and Health Risk

Hazard	Threat Complacency	Barrier	Top Event	Recovery Measures	Consequences
					
Moving Vehicle	Slippery Road	Slow Down	Loss of Control	ABS	Accident, Injuries, Fatalities


BEWARE
OF THE
BULL

The Children & the Bull

- Hazard = the bull
- Top Event = Loss of containment (escape of bull)

Threats/Complacency	Controls/Barriers	Escalation Factors
– corroded fence	– galvanized material	– acid rain
– rotting posts	– treated wood – metal posts	– termites, age – corrosion
– bull leans on fence	– barbed wire	– anger (state of mind) – Red Ball, barking dog
– bull charges fence	– barbed wire, 4 strands – metal posts – electric fence	– yelling child, dog
– falling tree limbs	– prune trees	– weather, age, insects
– gate unlatched/open	– sign, lock – vandalism	– ability to read,

The Children & the Bull

- Consequences = multiple fatalities
- Top Event = Loss of containment (escape of bull)

Recovery Measures	Escalation. Factors	Escalation Factor Controls
dog attack bull	dog not trained	send for regular training
run to car	panic situation	carry out simulation exercise
Horn scare the bull	Horn failed to work	Regular test horn
climb tree	Height phobia	Therapy and practice
run in different directions	panic situation	carry out simulation exercise

Hazard Identification or Complacency?? Which is the Bigger Problem??

* They BOTH ARE BIG PROBLEMS
* They BOTH LEAD TO ACCIDENTS
* They BOTH ARE HARD ELIMINATE
* They BOTH CAN EXIST ALONE
* They BOTH ARE INDIVIDUAL CONTROLLED
* They BOTH DEPEND ON THE INDIVIDUAL'S ATTITUDE ABOUT SAFETY

Coincident or Not ?

If,

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Equals,

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

Then,

K + N + O + W + L + E + D + G + E
11 + 14 + 15 + 23 + 12 + 5 + 4 + 7 + 5 = 96%

H + A + R + D + W + O + R + K
8 + 1 + 18 + 4 + 23 + 15 + 18 + 11 = 98%

Both are important, but the total falls just short of 100%

But,

A + T + T + I + T + U + D + E
1 + 20 + 20 + 9 + 20 + 21 + 4 + 5 = 100%

Safety really is about attitude.
Change of INDIVIDUAL's ATTITUDE is only way to fight HAZARD IDENTIFICATION & COMPLACENCY!

QUESTIONS

THANK YOU