



E-CHP

Performance Leads,
Results Count.

E-CHP is the next generation error reduction process that results in increased safety, quality, effectiveness, efficiency and production

Rob Fisher

President, Fisher IT, Inc.

802-233-0760

Rob@fisherit.com



Rob Fisher

President of Fisher IT, Inc.



- **Over 25 yrs. of nuclear experience**
- **Cumulative over 20 yrs. of non-nuclear industrial experience**
- **Specialties in:**
 - Human performance integration
 - Root Cause / Catastrophic Failure Analysis
 - Procedures / Programs / Processes
- **Conducted over 40 successful integration strategies in:**
 - Heavy Industry / Chemical / Metals
 - Nuclear / Traditional Generation / Transmission / Distribution
 - Construction
 - Department of Energy
- **Recognized contributor to reduction of fatalities and serious injuries**
- **What have you done for me lately?**
 - Featured speaker at NSC Campbell Leadership Institute
 - Developed IEEE Root Cause Standard
 - Provided OSHA with standard question list for significant injuries



My Goal Today

- Take about an hour to inform and intrigue you
- Provide you with a few nuggets

Is it **REASONABLE** to Believe?



E-CHP is a System



***E-CHP** is an interdependent system where individuals being aware of and managing their personality tendencies interact with people, programs, processes, work environment, organization and equipment*



Guiding Tenets

- Performance is based on awareness, reinforcement, and self-motivation
- Recognition that **people are fallible** and even the best will make mistakes
- Individuals will instinctively **react** within predictable personality tendencies
- Error traps are **predictable** and preventable
- Organizational values influence individual behaviors
- Events can be avoided by understanding **causes** and applying lessons learned

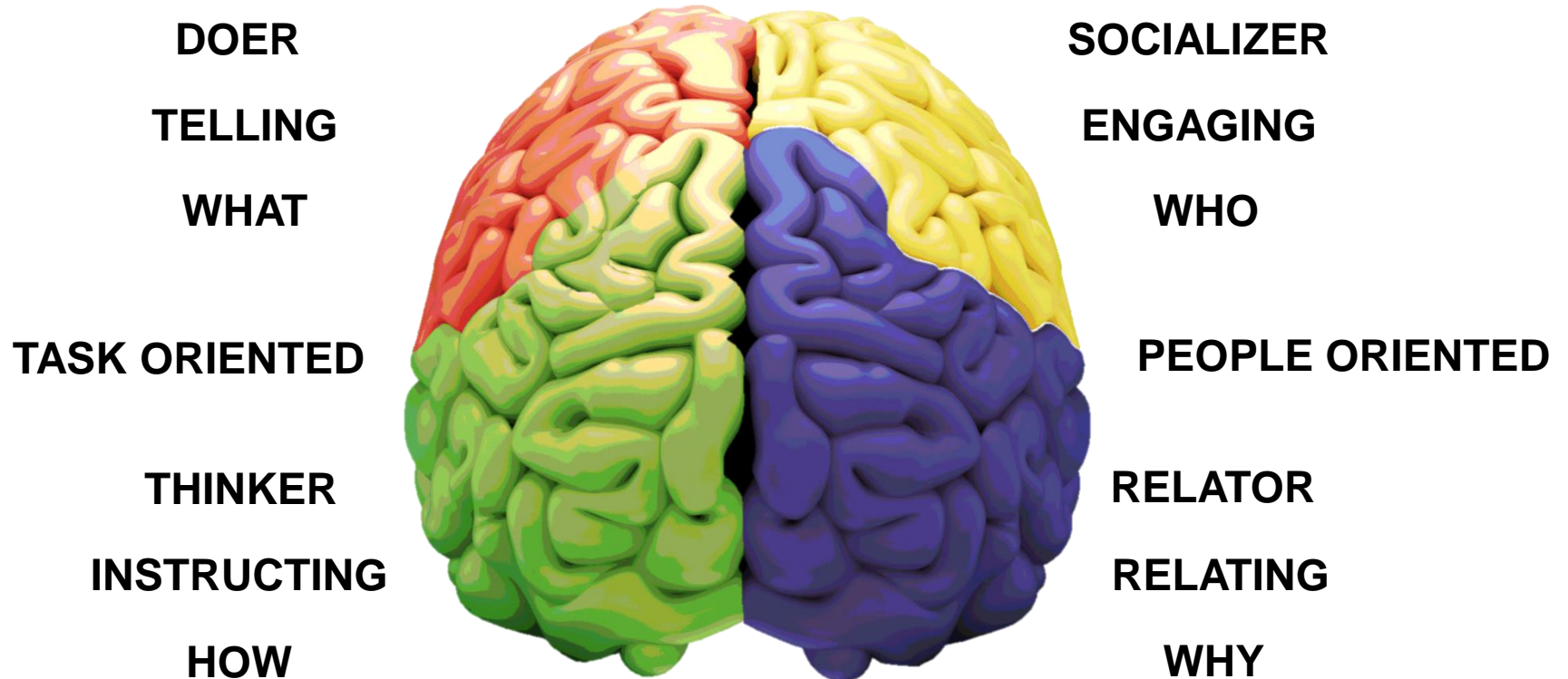




The Human Brain



ACTION ORIENTED – FASTER PACED



INFORMATION ORIENTED – NEEDS TIME TO PROCESS



My Strengths & Potential Limiters are...

STRENGTHS

Practical
Strong willed
Decisive
Efficient
Achiever
Competitive
Independent
Strong Ego

POTENTIAL LIMITERS

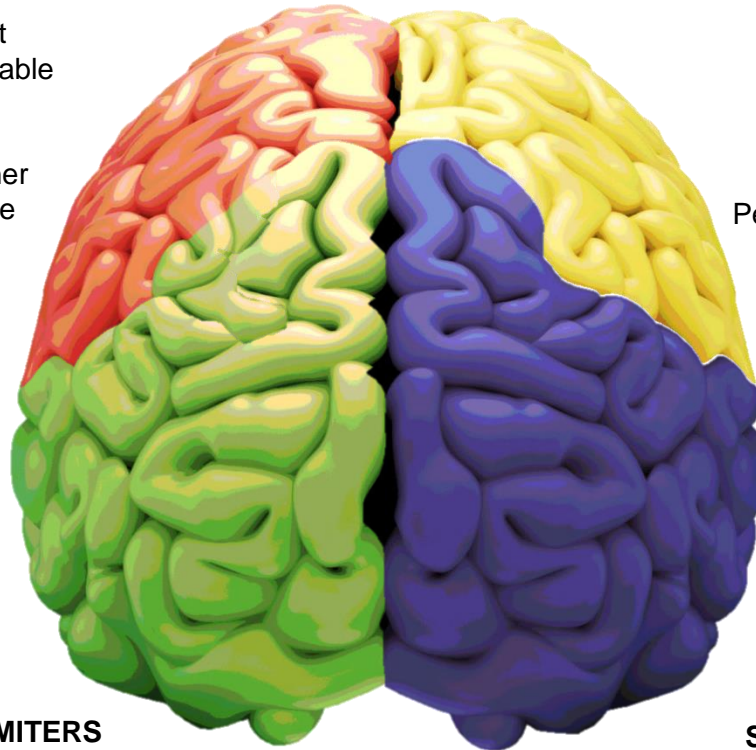
Domineering
Pushy
Impatient
Unapproachable
Tough
Harsh
Poor listener
Insensitive

STRENGTHS

Optimistic
Enthusiastic
Persuasive
Animated
Talkative
Stimulating
Influencing
People oriented

POTENTIAL LIMITERS

Emotional
Disorganized
Excitable
Reactive
Undisciplined
Vain
Manipulative
Overly talkative



STRENGTHS

Perfectionist
Accurate
Persistent
Serious
Analytical
Orderly
Cautious
Logical

POTENTIAL LIMITERS

Too serious
Picky
Judgmental
Fears criticism
Critical
Detached
Self critical
Procrastinates

STRENGTHS

Supportive
Agreeable
Contented
Calm
Amiable
Thorough
Dependable
Loyal

POTENTIAL LIMITERS

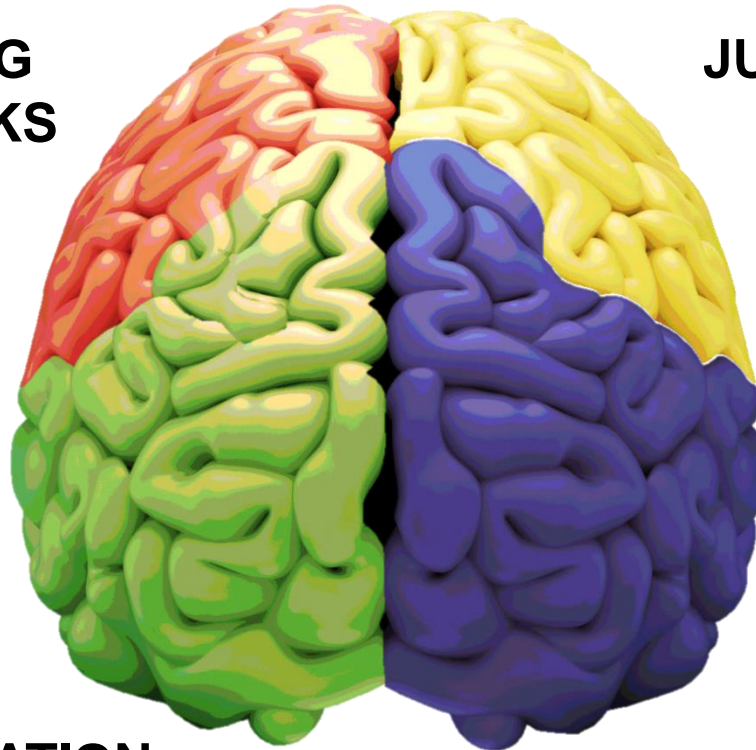
Stubborn
Unsure
Awkward
Possessive
Insecure
Resistant to change
Slow to decide
Reluctant to speak up



How Can We Get Hurt?

**RUSHING & TAKING
CALCULATED RISKS**

**JUMPING IN TO HELP
OTHER PEOPLE**



**LACK OF INFORMATION
& TIME TO PROCESS**

**BEING RUSHED OR
RELYING ON OTHERS**



Definitions Matter – A Lot!

- **Error:** An action or inaction that **unintentionally**
 - Results in an undesirable or unwanted condition OR
 - Leads a task or system out of limits OR
 - **Deviates** from a set of rules
- **Event** (or incident): The undesirable result of an error, a set of errors or a set of conditions
- **Deviation:** Not strictly complying with a rule, standard or expectation
- **Violation:** Intentionally not complying with a rule, standard or expectation
- **Active Error:** An action or inaction that results in immediate consequence
- **Latent Error:** An action or inaction that results in consequences that are delayed or create latent conditions

We MUST learn to separate the ERRORS from the EVENT

Errors and violations are different things

We MUST pay attention to all types of errors

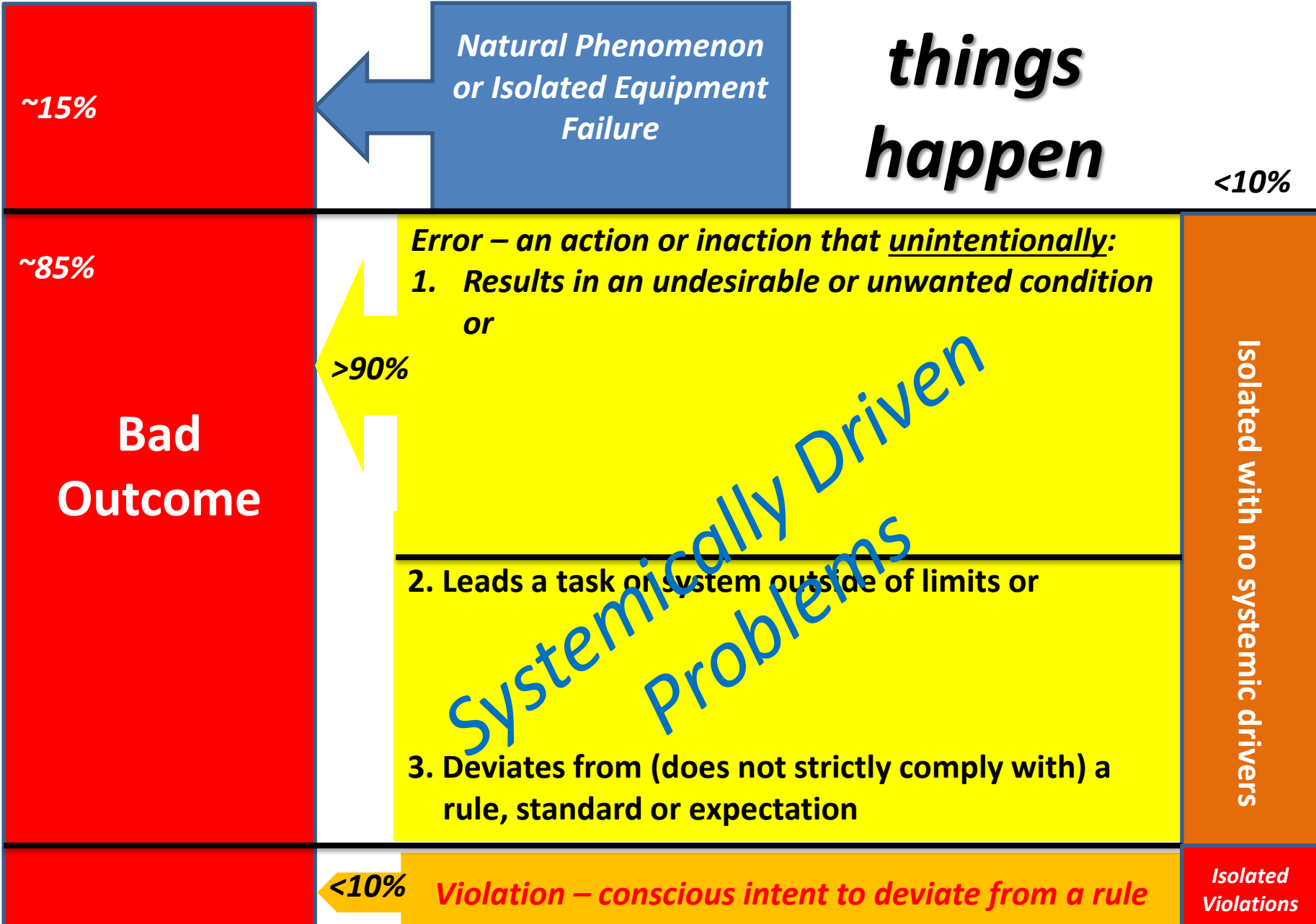


Some Basic Understanding

- **90% of events are caused by something OTHER THAN JUST the individual**
- **95% of people react very similarly (physiologically) to the same stimuli**
- **People do what they do, at the time that they do it, for reasons that make sense to them at the time**
- **E-CHP is NOT common sense**



How bad things happen



<10%

Natural Phenomenon or Isolated Equipment Failure

Error – an action or inaction that unintentionally:
1. Results in an undesirable or unwanted condition or

>90%

2. Leads a task or system outside of limits or

3. Deviates from (does not strictly comply with) a rule, standard or expectation

Systemically Driven Problems

Isolated with no systemic drivers

<10%

Violation – conscious intent to deviate from a rule

Isolated Violations

We are hired to do an OCCUPATION

(operator, mechanic, mobile equipment operator, janitor)

These occupations require us
to do JOBS

Drive Mobile Equipment,
Perform Lock-out-tag-out
Operate equipment,
Weld

These jobs
contain TASKS

Lock-out-tag-out THIS pump

Drive fork lift into THIS tight place
to handle THIS load THIS way

E-CHP

These tasks
contain
ACTIONS
(Steps)

Lock out supply
each electrical
supply

Tag out supply
each water
supply

Lift load up to
see tight space

Load goes into
area in truck

**is about improving our abilities
at the TASK and STEP level**

Performance Modes

Error Rates

- Skill based – habitual tasks – need low or no conscious thought – don't have to think...

1:1,000

- Rule based – there is a rule and the person knows rule exists but does not have to KNOW the rule (we cannot know all of the rules)...

1:100

- Knowledge based – The person does not know what they don't know – they THINK they know but have some doubt...

1:2 – 1:10 !

YOU CAN REDUCE ERROR RATES USING PROVEN TOOLS



What are Triggers?

Clues, Signals, Indications, Symptoms, or Prompts

- Observable actions or reactions and should “trigger” a response
- A recognized thought or individual perception
- Utilizing the 5 senses
 - Smell
 - Touch
 - Taste
 - Sight
 - Hearing
- The “6th Sense”- of intuition or a gut feeling that something just isn’t right



Traps & Triggers

- Stress
- Multi-tasking/High work load
- Time pressure

- Poor communications
- Vague/poor written guidance
- Overconfidence
- Infrequent or first time task

- Distractions
- First working day following time off > 4 days
- The end of a shift or extended shift

Triggers – Observable actions or reactions, a recognized thought or individual perception or a “gut-feeling” that something isn’t right.

Trap – A task related predicament (characteristic of a specific task or individual) that increases the probability for error during a specific action.

The traps and triggers are set differently and reacted upon differently by different personality types.



E-CHP Tools



Personal Intervention



Step-by-Step

Stop & Seek Out

Verbalize, Point and Touch

3-Part Communication

Pre-Task Brief

Show & Tell

Using the right tool, the right way, at the right time reduces error rate in factors of 10



Summary / Conclusion

The integration of the knowledge and use of personality tendencies significantly improves the probability that traditional human performance elements will be used the right way to reduce errors and events, especially on tasks that contain fatality or serious injury potential or relate to process safety.

E-CHP is the next generation error reduction process that results in increased safety, quality, effectiveness, efficiency and production.



Some Homework

Discover your e-colors and personality traits / tendencies at www.e-chp.net

Get your family and co-workers to do the same

Have a discussion about how your personality tendencies impact performance
(life, family, work, etc.)

