What’s your Favorite Hobby?
Leading Causes of Workplace Deaths

- Motor Vehicles: 32%
- Struck by Moving, Falling or Stationary Objects: 18%
- Gunshot Wounds: 8%
- Slips and Falls: 8%
- Heart Attacks/Strokes: 13%
- Airplanes: 5%
- Caught Between Object/Equipment: 5%
- Miscellaneous: 11%

Total: 100%
The Aim of the Investigation

- Exonerate individuals or management
- Satisfy insurance requirements
- Defend a position for legal argument
- Or, to assign blame
The Aim of the Investigation

THE KEY RESULT SHOULD BE TO PREVENT A RECURRENCE OF THE SAME ACCIDENT
THE ACCIDENT

WHAT IS AN ACCIDENT?
THE ACCIDENT

AN UNPLANNED AND UNWELCOMED EVENT WHICH INTERRUPTS NORMAL ACTIVITY.
THE ACCIDENT

THREE BASIC TYPES OF ACCIDENTS
THE ACCIDENT

MINOR ACCIDENTS:

SUCH AS PAPER CUTS TO FINGERS OR DROPPING A BOX OF MATERIALS
THE ACCIDENT

MORE SERIOUS ACCIDENTS THAT CAUSE INJURY OR DAMAGE TO EQUIPMENT OR PROPERTY:

SUCH AS A FORKLIFT DROPPING A LOAD OR SOMEONE FALLING OFF A LADDER
THE ACCIDENT

ACCIDENTS THAT OCCUR OVER AN EXTENDED TIME FRAME:

SUCH AS HEARING LOSS OR AN ILLNESS RESULTING FROM EXPOSURE TO CHEMICALS
THE ACCIDENT

ACCIDENTS HAVE TWO THINGS IN COMMON
THE ACCIDENT

THEY ALL HAVE OUTCOMES FROM THE ACCIDENT
THE ACCIDENT

THEY ALL HAVE CONTRIBUTORY FACTORS THAT CAUSE THE ACCIDENT
OUTCOMES OF ACCIDENTS

I  NEGATIVE ASPECTS

- DEATH & INJURY
- DISEASE
- DAMAGE TO EQUIPMENT & PROPERTY
- LITIGATION COSTS
- LOST PRODUCTIVITY
OUTCOMES OF ACCIDENTS

I. POSITIVE ASPECTS
   - ACCIDENT INVESTIGATION
   - CHANGE TO SAFETY PROGRAMS
CONTRIBUTING FACTORS

- ENVIRONMENTAL
- DESIGN
- SYSTEMS & PROCEDURES
- HUMAN BEHAVIOUR
CONTRIBUTING FACTORS

1. ENVIRONMENTAL
   - NOISE
   - VAPORS, FUMES, DUST
   - LIGHT
   - HEAT
   - CRITTERS
CONTRIBUTING FACTORS

I. DESIGN

- WORKPLACE LAYOUT
- DESIGN OF TOOLS & EQUIPMENT
CONTRIBUTING FACTORS

- SYSTEMS & PROCEDURES
  - LACK OF SYSTEMS & PROCEDURES
  - INAPPROPRIATE SYSTEMS & PROCEDURES
CONTRIBUTING FACTORS

1. HUMAN BEHAVIOUR
   - COMMON TO ALL ACCIDENTS
   - NOT LIMITED TO THE PERSON INVOLVED IN THE ACCIDENT
WHO SHOULD INVESTIGATE

- DEPENDENT ON SEVERITY OF THE ACCIDENT
  - INVESTIGATION TEAM
    - INDIVIDUALS INVOLVED
    - SUPERVISOR
    - SAFETY SUPERVISOR
    - UPPER MANAGEMENT
    - OUTSIDE CONSULTANTS
INVESTIGATION STRATEGY

- GATHER INFORMATION & ESTABLISH FACTS
- ISOLATE ESSENTIAL CONTRIBUTORY FACTORS
- DETERMINE CORRECTIVE ACTIONS
- IMPLEMENT CORRECTIVE ACTIONS
INVESTIGATION STRATEGY

- FACT GATHERING
  - BE IMPARTIAL & OBJECTIVE
  - COMPILATE PROCEDURES & RULES FOR THE AREA
  - GATHER MAINTENANCE RECORDS ON EQUIPMENT INVOLVED
INVESTIGATION STRATEGY

FACT GATHERING (CONTINUED)

- ISOLATE ACCIDENT SCENE
- PHOTOS & DIAGRAMS
- DO NOT DISCARD OR DESTROY ANYTHING
INVESTIGATION
STRATEGY

FACT GATHERING (CONTINUED)

- TIME IS OF THE ESSENCE
- OBTAIN INFORMATION
  - INJURED
  - WITNESSES
  - SUPERVISORS
  - OTHER PERSONNEL
INVESTIGATION STRATEGY

FACT GATHERING (CONTINUED)

- INTERVIEWS (SEPARATELY)
  - WHAT WERE YOU DOING?
  - HOW DO YOU THINK THE ACCIDENT OCCURRED?
  - HOW WERE YOU TRAINED FOR THE JOB?
  - WHAT IS THE SAFETY PROCEDURE FOR THIS JOB?
INVESTIGATION STRATEGY

FACT GATHERING (CONTINUED)

- OBTAIN FACTS NOT OPINIONS

- MAKE IT CLEAR THE OBJECT OF THE INVESTIGATION IS TO AVOID RECURRENCE, NOT TO APPORTION BLAME
INVESTIGATION STRATEGY

- ISOLATE ESSENTIAL CONTRIBUTORY FACTORS
  - INVESTIGATION TEAM
  - EVALUATES ALL FACTORS CONCERNED
INVESTIGATION STRATEGY

- ISOLATE ESSENTIAL CONTRIBUTORY FACTORS
  - INVESTIGATION TEAM
    - ISOLATES THE KEY FACTOR(S) BY ASKING THE FOLLOWING QUESTION....
INVESTIGATION STRATEGY

WOULD THE ACCIDENT HAVE HAPPENED IF THIS PARTICULAR FACTOR WAS NOT PRESENT?
INVESTIGATION STRATEGY

- DETERMINE CORRECTIVE ACTIONS

  - INVESTIGATION TEAM
    - INTERPRETS & DRAWS CONCLUSION
    - DISTINCTION BETWEEN INTERMEDIATE & UNDERLYING CAUSES
INVESTIGATION STRATEGY

- DETERMINE CORRECTIVE ACTIONS
  - INVESTIGATION TEAM
    - RECOMMENDATIONS BASED ON KEY CONTRIBUTORY FACTORS AND UNDERLYING CAUSES
INVESTIGATION STRATEGY

- IMPLEMENT CORRECTIVE ACTIONS
  - INVESTIGATION TEAM
    - RECOMMENDATION(S) MUST BE COMMUNICATED CLEARLY
    - STRICT TIME TABLE ESTABLISHED
    - FOLLOW UP CONDUCTED
BENEFITS OF ACCIDENT INVESTIGATION

- PREVENTING RECURRENCE
- IDENTIFYING OUT-MODED PROCEDURES
- IMPROVEMENTS TO WORK ENVIRONMENT
BENEFITS OF ACCIDENT INVESTIGATION

- INCREASED PRODUCTIVITY
- IMPROVEMENT OF OPERATIONAL & SAFETY PROCEDURES
- RAISES SAFETY AWARENESS LEVEL
BENEFITS OF ACCIDENT INVESTIGATION

WHEN AN ORGANIZATION REACTS SWIFTLY AND POSITIVELY TO ACCIDENTS AND INJURIES, ITS ACTIONS REAFFIRM ITS COMMITMENT TO THE SAFETY AND WELL-BEING OF ITS EMPLOYEES
Are we to leave our children a country ridden with accidents and their corresponding burden of human and economic loss?

Or . . . can we prove that as Americans, we can progress, both technically and morally, to provide our citizens with a life and work style worthy of the sufferings, sacrifices and expectations of our founding fathers?

Raymond J. Colvin, Sr.
NYU.......1959
SAFETY FIRST

THE SAFE WAY IS THE BEST WAY