







Job Safety Analysis

- # Job means “task”
- # (Changing a tire not auto mechanic)
- # “key” steps
- # too detailed becomes cumbersome
- # not enough detail becomes useless

Break job down into key steps

AVOID

- # making the breakdown so detailed That an unnecessarily large number of steps results
- # making the job breakdown so general that basic steps are not recorded

Group Activity

Job Safety Analysis
“Changing a Flat Tire on an
Automobile”

Key Steps (TOO MANY) Changing a Flat Tire

- # Pull off road
- # Put car in "park"
- # Set brake
- # Activate emergency flashers
- # Open door
- # Get out of car
- # Walk to trunk
- # Put key in lock
- # Open trunk
- # Remove jack
- # Remove Spare tire



Key Steps (NOT ENOUGH) Changing a Flat Tire

- # Park car
- # take off flat tire
- # put on spare tire
- # drive away



Key Job Steps JUST RIGHT Changing a Flat tire

- | | |
|---------------------------------|---------------------|
| # Park car, set brake | # tighten lug nuts |
| # remove jack & tire from trunk | # store tire & jack |
| # loosen lug nuts | |
| # jack up car | |
| # remove tire | |
| # set new tire | |
| # jack down car | |



Hazards

- ⌘ Parking Car
 - Struck by Traffic
- ⌘ Removing tire & jack
 - Back Strain
 - bang head on trunk
- ⌘ Loosen lug nuts
 - back/arm strain
 - slip & fall
- ⌘ Jacking up car
 - car could fall off jack
- ⌘ Setting new tire
 - fingers pinched
 - back strain
- ⌘ Tighten nuts
 - back strain
 - slip & fall

Work Observation

- ⌘ Select experienced worker(s) who will cooperate and participate in the JSA process.
- ⌘ Explain purpose of JSA.
- ⌘ Observe the employee performing the job and write down basic steps.
- ⌘ Completely describe each step.
- ⌘ Note deviations (Very Important!)

Identify Hazards and Potential Accidents

- ⌘ Search for Hazards
 - Produced by Work
 - Produced by Environment
- ⌘ Repeat job observation as many times as necessary to identify all hazards



Develop Solutions

- # Find a new way to do job
- # Change physical conditions that create hazards
- # Change the work procedure
- # Reduce frequency

New way to do job

- # Determine the work goal of the job, and then analyze the various ways of reaching this goal to see which way is safest.
- # Consider work saving tools and equipment.

Change in physical conditions

- # Tools, materials, equipment layout or location
- # Study change carefully for other benefits (costs, time savings)

Change in work procedures

- # What should the worker do to eliminate the hazard
- # How should it be done?
- # Document changes in detail

Reduce frequency

- # What can be done to reduce the frequency of the job??
- # Identify parts that cause frequent repairs - change
- # Reduce vibration save machine parts

What effects??

- # A job that has been redesigned may affect other jobs or work processes.
- # Check or re-observe the new process once it has been redesigned


