

# Safety Flash

## **Risk Acceptance and Heat Contribute to Baytown Refinery Contractor Recordable Injury – Dislocated Shoulder**

### **Incident Description:**

On 08/02/11, a contractor working the Flexicoker Turnaround was descending stairs carrying a chipping gun on his right shoulder (weighing between 30-35 lbs.) when he felt a cramp in his right calf which caused him to miss a step. Worker slipped causing the chipping gun to impact his shoulder resulting in a dislocated shoulder.

### **Direct Cause:**

#### **Risk Analysis, Follow-up & Understanding, Worker Understanding LTA – Risk Acceptance Level LTA**

- Worker did not identify the risk/hazards of carrying a large tool while descending stairs. Elevator was available to transport tools, but worker chose to use muscle instead of machine.
- Worker involved understood the risk associated with heat stress. He thought he was well hydrated and chose to continue to perform the task even though signs of heat stress had occurred.

### **Corrective Actions:**

- Stand down meeting held with contractor personnel to discuss incident
- Strengthen process to include initial and on-going plan to use elevator or skid plan to transport large tools.
- Post person at elevator with radio to call for elevator at each level when needed
- Leverage incident across sites for continuing education and prevention
- Re-emphasize the importance of “See Something – Say Something” with workforce

### **Heat Management Reminders:**

**Drink plenty of fluids before, during and after outside activity.** Remember the thirst sensation is not a good indicator to use to know when to replace the fluids lost from sweating (a good rule of thumb is to drink 8 oz. of liquid every 30 minutes in a hot environment). If fluids are not available at the work site, contact your supervisor and request that fluids be provided.

**Avoid Energy Drinks.** Some energy drinks can increase susceptibility to Heat Stress due to high caffeine content. Additional ingredients can increase metabolism and accelerate dehydration.

**Self-pace your work in hot weather.** If you are not feeling well due to the heat, seek help from a co-worker and go to the NEAREST air-conditioned building, take a rest break and drink fluids.

**Know your own limitations.** The following factors can pre-dispose an individual to the effects of a heat-related illness: personal medical condition/illness, medications, physical conditioning, obesity, and less than adequate acclimatization.

**Watch out for fellow employees.** Observe your co-workers. If you suspect that they are starting to feel the effects of the heat, INTERVENE and encourage them to take a break in a cool area and drink some fluids.

**Anticipate/plan work activities.** Try to anticipate work activities so that strenuous work can be performed during the cooler hours of the day or when extra resources are available to rotate employees.

**Take extra precautions when using some PPE.** Remember - PPE used to prevent chemical exposure, e.g. respiratory protection, chemical suits/gloves, etc. increases the risk of heat-related illnesses. This lower tolerance to heat must be considered in the job activity/scope.