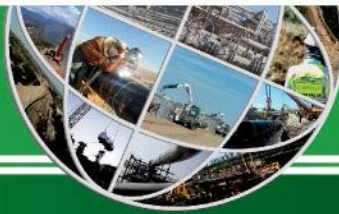


LESSON LEARNT



04/2017

Date:

April 2017

OBJECT: Heat Stress

DESCRIPTION:

Heat is a serious hazard in pipeline construction. In many Countries where SICIM operates, such as Mexico, Israel, Turkey, Congo, Kazakhstan, Iraq, during the warmer months of the year, there is a high probability that this phenomenon will occur. Heat stress occurs when the body's means of controlling its internal temperature starts to fail. The body reacts to heat by increasing the blood flow to the skin's surface and by sweating. But sometimes the body may not cool off fast enough. Too much heat can make tired, hurt the job performance, and increase the chance of injury. You can get:

- ✓ Dehydration: When the body loses water, you can't cool off fast enough. You feel thirsty and weak;
- ✓ Heat rash: You can develop heat rash when your pores become blocked and sweat can't escape;
- ✓ Cramps: You can get muscle cramps from the heat even after you leave work;
- ✓ Heat exhaustion: You feel tired, nauseous, headachy, and giddy (dizzy and silly). Your skin is damp and looks muddy or flushed. You may faint;
- ✓ Heat stroke: You may have hot dry skin and a high temperature. Or you may feel confused. You may have convulsions or become unconscious. Heat stroke can kill you unless you get emergency medical help.



RISK FACTORS:

Factors which can cause heat stress and must be included also in the daily JHA:

- high temperature and humidity, direct sun exposure, no breeze or wind;
- consumption of tobacco, alcohol and excessive eating;
- work load & heavy physical labour;
- low liquid intake;
- work clothing;
- no recent exposure to hot workplaces.



SYMPTOMS & TREATMENTS:

	SYMPTOMS	TREATMENTS & FIRST AID
HEAT CRAMPS	<ul style="list-style-type: none"> • Irritability & Loss of appetite • Heat rash, nausea • Muscle spasms • Painful muscle cramps (limbs & abdomen) 	<ul style="list-style-type: none"> • Drink more water • Have a cold shower or bath • Lay in cool place with legs supported and elevated • Massage limbs gently to ease spasm or firmly if cramped, then drink electrolyte replacement solutions • Do not give salt tablets or high sodium solutions
HEAT EXHAUSTION	<ul style="list-style-type: none"> • Profuse perspiration • Cold, clammy, pale skin • Headache & vomiting • Weak but rapid pulse • Poor coordination • Normal temperature but faintness 	<ul style="list-style-type: none"> • Lay in cool place with legs supported and elevated • Loosen clothing & apply wet clothes to heat & body • Fan the victim or move him to an air conditioned env. • Give sips of cold water or electrolyte drink • If vomiting continues, seek medical assistance immediately
HEAT STROKE	<ul style="list-style-type: none"> • Skin flushed, hot and unusually dry • Dry swollen tongue • High body temperature (more than 40°) • Deep unconsciousness may develop rapidly 	<ul style="list-style-type: none"> • Seek medical assistance urgently • In the meantime: <ul style="list-style-type: none"> ○ Lay victim in cool place and remove outer clothing ○ If unconscious, check air-way and breathing ○ Cool victim quickly by applying cold water or wet sheets ○ When conscious, give sips of water