

A Serious Incident and Fatality (SIF) is an event that results in a fatal, life-altering or life-threatening injury or illness.

- Life-altering injuries or illnesses result in the loss of a body part, organ function or otherwise permanently disables that person's normal life activity
- Life-threatening injuries or illnesses that require the immediate intervention to provide life-sustaining support

Based on industry data from SIF events, the following exposure categories have the potential for serious injuries and fatalities and require proper recognition and controls.

Caught Between / By or In:

Any situation where a body part could be amputated, crushed, lacerated or pinched due to being caught in mechanical equipment or between objects.

(Note: If the person was caught between as a result of a motor vehicle we recommend classifying it as Struck by Motorized Vehicle.)

- Was there force significant enough to cause amputation of a digit or limb?
- Was there force significant enough to crush the body or body part?
- Did the person reach into or get a body part caught in an operating piece of equipment?

Missteps and Falls:

Any situation where a person could fall or where a person is working at height where their feet are >4 feet above the surface. The fall could be the result of slipping, stumbling, tripping or stepping on an object or losing their balance.

(Note: Use this category if the injury or potential injury is related to hitting an object while falling or hitting the ground.)

- Did the person fall or could they have fallen a distance of 4 feet?
- Did the person fall backward?
- Did the person fall on a frictionless surface such as ice or small plastic pellets?
- Did the person fall in an area that had SIF hazards in the immediate fall zone?

Motorized Equipment / Vehicle Operation:

Any situation where a person is operating or controlling motorized equipment (ATV, boat, car, forklift, truck, etc.) or is a passenger, where the operator or passenger are at risk of injury.

(Note: SIF potential is being evaluated for the driver and passenger of the vehicle.)

- Was there a reasonable chance of rollover?
- Was a critical control system (steering, brakes) lost or compromised?
- Was the equipment being used beyond the manufacturer-rated capacity?
- Was the equipment being operated in an unintended or unauthorized manner?
- Did the airbags deploy?
- Was there a crash where the speed of the operated equipment or vehicle striking exceeded 15 mph?
- Was there a crash in an intersection?
- Was there a crash where the striking equipment exceeded twice the weight of the struck vehicle?
- Was the motor vehicle involved in a pull-away incident?
- Did the operator fall asleep or was the operator operating the motor vehicle while impaired?

Struck By – Falling, Rolling, Flailing, Flying Object or Load Moving:

Any situation where a person could be at risk of being struck by a falling, rolling, flailing object, a flying projectile or a horizontally moving load.

(Note: If gravity provides the energy this category would apply.)

- Was the shape of the falling object likely to cause a life-threatening injury?
- Was the object or projectile of a size or shape and velocity likely to cause serious bodily harm?

“You will achieve the level of safety that you demonstrate you want to achieve.”

Struck by / Contact with – Release of Stored Energy:

Any situation with a sudden, uncontrolled release of energy from an electrical source, liquid or gas under pressure, mechanical tension or other stored energy.

- Was the release unexpected and with a force that it could cause serious bodily harm?
- Did the incident involve electrical shock or arc flash?

Extreme Atmospheric Temperature:

Any situation where a person is working in extremely cold or hot temperatures.

- Was the person exposed to frostbite temperatures without adequate protection?
- Was heat and humidity sufficient to cause heat stroke?
- Given the heat and humidity, were there inadequate breaks, hydration or shaded areas?

Animal or Plant Contact:

Any situation where a person could be attacked, bitten or stung by animals or insects or exposed to a toxic plant.

- Was the person susceptible to anaphylactic shock?
- Was the animal of a size and ferocity to cause life-threatening injuries?
- Was the person bitten by a venomous animal?

Fire or Explosion:

Any situation involving an uncontrolled fire or explosion.

- Was the fire unable to be controlled by a handheld fire extinguisher?
- Was there significant fire load in the immediate area of the fire?
- Was the explosion unexpected and uncontrolled?
- Was explosive material found in an unprotected state?
- Was flammable liquid or gas leaking uncontrollably?

Hazardous Substance Contact:

Any situation where a biological, chemical or radiological hazard could be inhaled, ingested or in contact with skin; or any situation where an extremely hot or cold material could contact the person.

- Was the substance corrosive, toxic or a health hazard and was the exposure amount enough to cause a life-threatening injury?
- Did the radiation exposure exceed or could it have exceeded the Personal Exposure Limit?
- Was the biological agent life-threatening and uncontrolled?
- Was the material hot enough to cause second- and third-degree burns or cold enough to cause frostbite or freezing of the skin?

(Pedestrian) Struck by – Motorized Equipment or Vehicle:

Any situation where a person outside a motor vehicle could be contacted or struck by motorized equipment or motor vehicle.

- Did the motorized equipment / vehicle make contact, strike or nearly make contact with a person?

Struck by / Contact with Power Equipment or Tool:

Any situation where a person contacts the operating part of power equipment or tool in their control or in the control of others.

- Could the contact have resulted in a serious laceration, amputation or other bodily injury capable of being life-threatening or altering?

