

Table 2. Common Oil Spill Worker Safety and Health Hazards

Response workers with work involving contact/exposure to fresh crude oil		
Overall	Onshore / On Land	Offshore: Marine Vessels
Heat stress (heat exhaustion, heat stroke) Sunburn and sun poisoning	Struck-by moving vehicles, mobile equipment (e.g., forklifts or other powered industrial trucks), or earthmoving equipment in work areas, Struck-by cars or trucks driving by work areas, Struck by vehicles at worker assembly points	Vessel and boat operation accidents, including launching or landing Vessel/barge deck accidents. Loading/unloading accidents (equipment, supplies, or crews)
Cold stress (frostbite, hypothermia)	Drowning (when working near water or docks)	Drowning (from working aboard vessels or on docks)
Skin and eye irritation or rashes (dermatitis)	Handling (e.g., placing or picking up) or cleaning oiled boom and equipment during or after source control activities	Inhalation hazards from exposure to hydrocarbons/VOCs during source control activities near the source of a release
Chemicals from engine exhaust or generators (e.g., carbon monoxide)	Inhalation hazards (e.g., benzene and other toxic volatile components) from exposure to fresh oil	Inhalation hazards (e.g., benzene and other toxic volatile components) from exposure to fresh oil near the source of a release
Slips, trips, and falls	Accidents during rapid deployment of fencing (fence booms) to protect sensitive areas (e.g., wetlands)	Accidents during defensive booming to protect sensitive areas (e.g., marshes, bayous, marinas)
Back injury from lifting, carrying, and pulling (e.g., booms)	Inhalation hazards (e.g., sulfur dioxide) if smoke plume occurs immediately after oil spill	Skin, eye, or respiratory irritation if direct contact with fresh oil occurs immediately after release
Cuts, sprains, and other injuries	Fire hazards immediately after release, including explosion risks depending on nearby facilities	Fire hazards immediately after release
Noise	Contact with oil-contaminated plants	Defensive booming accidents
Eye injuries (dust, debris, oil droplets, other chemicals)	Contact with oil-contaminated animals	Accidents from conducting equipment maintenance in harsh offshore environments (high winds or waves)
Exhaustion/fatigue from long hours and demanding work	Animals (snakes, rodents, alligators) Insects (mosquitos, fire ants, ticks, bees/wasps) Poisonous plants (poison ivy, poison oak)	Cleaning/decontamination of vessels or boats (e.g., scraping oil off surfaces)
Lightning and severe weather	Exposure during environmental sampling near the source of an onshore or on-land release (e.g., chemicals, particulates)	Exposure during environmental sampling near the source of an offshore release (e.g., chemicals, particulates)
Ergonomic stresses		
Response, recovery, and cleanup workers with work involving contact/exposure to weathered crude oil		
Overall	Onshore (including shoreline cleanup) / On land	Offshore: Marine Vessels and Vessels of Opportunity (VOO)
Heat stress (heat exhaustion, heat stroke) Sunburn and sun poisoning	Struck-by moving vehicles, mobile equipment (e.g., forklifts or other powered industrial trucks), or earthmoving equipment in work areas, Struck-by cars or trucks driving by work areas, Struck by vehicles at worker assembly points	Vessel and boat operation accidents, including launching or landing Vessel/barge deck accidents. Loading/unloading accidents (equipment, supplies, or crews)
Cold stress (frostbite, hypothermia)	Drowning (when working near water or docks)	Drowning (from working aboard vessels or on docks)
Skin and eye irritation or rashes (dermatitis)	Handling (e.g., placing) clean boom at tideline Handling (e.g., picking up) or cleaning oiled boom and equipment	Handling (e.g., placing) clean boom Handling (e.g., picking up) or cleaning oiled boom and equipment
Chemicals from engine exhaust or generators (e.g., carbon monoxide)	Removing tar balls and other oil-contaminated debris on shorelines or beaches by hand	Skin, eye, or respiratory irritation from exposure to oily droplets/oily particles put into the air from weathered oil during cleanup operations
Slips, trips, and falls	Mechanical sand raking; shoveling	Accidents from conducting equipment maintenance in harsh offshore environments (high winds or waves)
Back injury from lifting, carrying, and pulling (e.g., booms)	Vacuuming (e.g., vacuum trucks) and skimming (e.g., portable skimmers) to clean up weathered oil along shorelines	Exposure to heat or combustion by-products from controlled burns (in-situ burning), along with hydrocarbons/ VOCs for controlled burns for less weathered oil nearer to source of release
Cuts, sprains, and other injuries	Cutting/removing oil-contaminated plants	Skin, eye, or respiratory irritation from exposure to dispersants, or dispersant and crude oil mixtures
Noise	Removing/cleaning oil-contaminated animals	Skimming or pumping operations for weathered oil near shore
Eye injuries (dust, debris, oil droplets, other chemicals)	Medium or low pressure flushing	Skimming operations for weathered oil offshore
Exhaustion/fatigue from long hours and demanding work	High pressure cleaning	High pressure flushing

Traumatic incident stress during/after cleanup, especially for cleanup workers from affected communities	Animals (snakes, rodents, alligators) Insects (mosquitos, fire ants, ticks, bees/wasps) Poisonous plants (poison ivy, poison oak)	Cleaning/decontamination of vessels or boats (e.g., scraping oil off surfaces)
Lightning and severe weather	Exposure during environmental sampling	Exposure during environmental sampling near oil slicks, dispersant applications, controlled burns
Ergonomic stresses		