Risks and Health Effects Associated with Farmworker Tasks/Activities

Listed below are common farm tasks and the hazard/risk and health concerns associated with the tasks. Use this to chart to help you understand the occupational health of your patient. Also, for vulnerable populations it is import to:

- Consider the workers' lack of control over workplace hazards and inquiring about worker's ability to take protective action.
- For younger workers, consider adolescent development with respects to hazards and tasks.

Task or Activity		Hazard/Risk	Health Effect
1	Hand-weeding	Microbiological Contaminants, Dust, Repetitive Motion, Weight Strain, Hand/Sharp Tools, Sun/Heat Exposure, Contact with pesticide residues	Respiratory Illnesses; Skin Infections; Musculoskeletal Problems; Heat Stress/Stroke; Sun Burns; Dehydration; Eye Injuries; Lacerations; Acute pesticide poisonings; Chronic exposure toxicity associated with pesticides may include endocrine disruption, developmental toxicity to the nervous, immunological, pulmonary systems, and cancer; Some plant exposures are associated with contact dermatitis, photoreactive dermatitis, etc NOTE: Adolescents are likely more vulnerable to pesticide and other chemical exposures due to developing organs and rapidly changing endocrine, neuro, other systems, etc. and are vulnerable to exposure due to inadequate supervision, lack of personal protective equipment and proper use/fit/availability
2	Bending	Ergonomic Hazards - Heavy lifting, stooping, carrying, repetitive motions	Musculoskeletal problems
3	Lifting 3	Ergonomic Hazards - Heavy lifting, stooping, carrying, repetitive motions	Musculoskeletal problems



Ta	ask or Activity	Hazard/Risk	Health Effect
4	Hand-Harvesting Fruits and Vegetables	Microbiological Contaminants, Dust, Repetitive Motion, Weight Strain, Hand/Sharp Tools, Sun/Heat Exposure, Unprotected Eyes, Contact with pesticide residues	Respiratory Illnesses; Skin Infections; Musculoskeletal Problems; Heat Stroke; Sun Burns; Dehydration; Eye Injuries; Lacerations; Acute pesticide poisonings; Chronic exposure toxicity associated with pesticides may include endocrine disruption, developmental toxicity to the nervous, immunological, pulmonary systems, and cancer; Some plant exposures are associated with contact dermatitis, photoreactive dermatitis, etc NOTE: Adolescents are likely more vulnerable to pesticide and other chemical exposures due to developing organs and rapidly changing endocrine, neuro, other systems, etc. Inadequate supervision, lack of personal protective equipment and proper use/fit/availability
5	Pruning Trees and Vines	Heights, Ladders, Weight Strain, Repetitive Motion, Hand/Sharp Tools, Sun/Heat, Contact with pesticide residues	Falls; Trauma; Musculoskeletal Problems; Heat Stroke; Sun Burns; Dehydration; Eye Injuries; Acute pesticide poisonings; Chronic exposure toxicity associated with pesticides may include endocrine disruption, developmental toxicity to the nervous, immunological, pulmonary systems, and cancer; Some plant exposures are associated with contact dermatitis, photoreactive dermatitis, etc. NOTE: Adolescents are likely more vulnerable to pesticide and other chemical exposures due to developing organs and rapidly changing endocrine, neuro, other systems, etc. and are vulnerable to exposure due to inadequate supervision, lack of personal protective equipment and proper use/fit/availability
6	Harvesting Field Crops	Microbiological Contaminants, Dust, Repetitive Motion, Weight Strain, Hand/Sharp Tools, Sun/Heat Exposure, Contact with pesticide residues	Respiratory Illnesses; Skin Infections; Musculoskeletal Problems; Heat Stroke; Sun Burns; Dehydration; Eye Injuries; Lacerations; Acute pesticide poisonings; Chronic exposure toxicity associated with pesticides may include endocrine disruption, developmental toxicity to the nervous, immunological, pulmonary systems, and cancer; Some plant exposures are associated with contact dermatitis, photoreactive dermatitis, etc NOTE: Adolescents are likely more vulnerable to pesticide and other chemical exposures due to developing organs and rapidly changing endocrine, neuro, other systems, etc. Inadequate supervision, lack of personal protective equipment and proper use/fit/availability

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7	Climbing	Heights, Ladders, Weight Strain, Contact with Wires	Falls, Trauma, Musculoskeletal Problems, Electrocution
8	Harvesting Tree Fruit	Heights, Ladders, Weight Strain, Repetitive Motion, Unprotected Eyes, Sun/Heat, Contact with pesticide residues, Contact with plant based allergens/irritants	Falls, Trauma, Musculoskeletal Problems, Eye Injuries, Heat Stress/Stroke, Burns, Dehydration, Acute pesticide poisonings; Chronic exposure toxicity associated with pesticides may include endocrine disruption, developmental toxicity to the nervous, immunological, pulmonary systems, and cancer. Some plant exposures are associated with contact dermatitis, photoreactive dermatitis, etc NOTE: Adolescents are likely more vulnerable to pesticide and other chemical exposures due to developing organs and rapidly changing endocrine, neuro, other systems, etc. and are vulnerable to exposure due to inadequate supervision, lack of personal protective equipment and proper use/fit/availability
9	Detasseling Corn	Repetitive Motion, Hand Tools, Unprotected Eyes, Sun/Heat, Contact with pesticide residues	Musculoskeletal Problems, Lacerations, Infections, Eye Injuries, Heat Stroke, Burns, Dehydration, Road accidents (due to obstructed vision from corn plants). Acute pesticide poisonings; Chronic exposure toxicity associated with pesticides may include endocrine disruption, developmental toxicity to the nervous, immunological, pulmonary systems, and cancer. NOTE: Adolescents are likely more vulnerable to pesticide and other chemical exposures due to developing organs and rapidly changing endocrine, neuro, other systems, etc. and are vulnerable to exposure due to inadequate supervision, lack of personal protective equipment and proper use/fit/availability



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10	Use of Chemicals/ Pesticide Application	Pesticides, fumigants, herbicides, solvents	Acute pesticide poisonings, Eye injuries, Chronic exposure toxicity associated with pesticides may include endocrine disruption, developmental toxicity to the nervous, immunological, pulmonary systems, and cancer. NOTE: Adolescents are likely more vulnerable to pesticide and other chemical exposures due to developing organs and rapidly changing endocrine, neuro, other systems, etc. and are vulnerable to exposure due to inadequate supervision, lack of personal protective equipment and proper use/fit/availability.
11	Working Near Water	Water – Irrigation, Drainage Ditches, Ponds, Rivers, Cisterns, Wells, Lagoons, Tanks, Reservoirs	Drowning
12	Working in Isolation	Working in Isolation	Increases the change of injury for all tasks
13	Working with Large Animals	Large Animal Movements (kicks, being pinned, being stepped on, bites) and in CAFOs (Confined Animal Feeding Operations) Chemicals (Disinfectants, Ammonia, hydrogen sulfide, VOCs, methane, carbon dioxide), Dusts, Microbiological Contaminants, Antibiotic- Resistant Bacteria	Musculoskeletal injuries and strains; Injury' Infections; Trauma; Weight strain injuries, Skin irritations; Exposures, Respiratory Illness (Bronchitis, Increased Airway Reactivity or NALC); Infectious Disease; Zoonotic Infections

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14	Milking Cows	Large Animal Movements (kicks, being pinned, being stepped on, bites), Repetitive Motion, Disinfectants - detergents, sanitizers	Injury; trauma; Infections, Weight strain injuries, Muscle strains and injuries: Skin irritations
15	Repairing Fences	Barbed Wire, Sharp Tools, Electric Wires, Weight of Materials, Unprotected Eyes	Lacerations, Eye Injuries, Whip injuries from tensioning devices
16	Driving Farm Equipment (tractors, utility vehicles, forklifts, skid steers, mowers, combines)	Vehicle Overturns, Roll Overs, Collision with Obstacles, Moving pieces, Vehicular exhaust (diesel)	Injuries, Trauma, Entanglement of fingers, limbs, hair and clothing can cause injury and amputation, Carbon monoxide poisoning in closed spaces
17	Getting to Work	Transportation, Vehicular exhaust/diesel	Motor vehicle Injuries, Trauma, Asthma aggravation NOTE: Limited access to safe and reliable transportation forces workers to resort to unsafe options.



Ta	sk or Activity	Hazard/Risk	Health Effect
18	Working Outside	Sun/Heat/Cold Exposure, Snakes, Insects, Plant Based Allergens and Irritants, Microbiological Contaminants, Lightening; wet conditions	Heat Stress/Stroke, Sun Burns, Dehydration, Eye Injuries, Bites, Dermal & Respiratory Problems, Pterygium; Early and prolonged exposure to UV light; Electrocution, Slips, Trips and Falls, Slippery Tools, Obstructed Vision
19	Harvesting Tobacco	Sun/Heat Exposure, Repetitive Motion, Sharp Tools, Wet Plant LeavesTobacco (nicotine) exposure, Weight Strain, Unprotected Eyes	Heat Stress/Stroke, Burns, Dehydration, Musculoskeletal Problems, Lacerations, Muscle Strain, Green Tobacco Sickness, Eye Injuries
20	Working With Grain/Hay	Particles (dusts, pollens), Grain Engulfment	Suffocation; Auger injuries; Acute grain fever, Allergic conjunctivitis, Skin atopy; Respiratory infections; Farmers lung
21	Composting	Repetitive Motion, Weight Strain, Dusts, Mold, Organic Particles, Insects	Muscle Strains, Musculoskeletal Problems, Derma & Respiratory Problems, Allergies, Farmers lung

Task or Activity		Hazard/Risk	Health Effect
22	Pumping out, agitating manure pits (open and under CAFOs)	Falling in, Chemicals (Ammonia, hydrogen sulfide, VOCs, methane, carbon dioxide), Dusts, Microbiological Contaminants, Antibiotic- resistant Bacteria	Drowning, Respiratory Illness (Bronchitis, Increased Airway Reactivity or NALC), Infectious Diseases, Zoonotic Infections, Hydrogen sulfide suffocation, NOTE: Shorter stature of workers make them more vulnerable (gases are heavier than air)
23	Working in Wet/Moist Areas	Wet Feet	Trench Foot, Foot Fungus

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