

International Hazard Datasheets on Occupation



Dairy Farmer

What is a Hazard Datasheet on Occupation?

This datasheet is one of the International Datasheets on Occupations. It is intended for those professionally concerned with health and safety at work: occupational physicians and nurses, safety engineers, hygienists, education and Information specialists, inspectors, employers' representatives, workers' representatives, safety officers and other competent persons.

This datasheet lists, in a standard format, different hazards to which dairy farmers may be exposed in the course of their normal work. This datasheet is a source of information rather than advice. With the knowledge of what causes injuries and diseases, it is easier to design and implement suitable measures towards prevention.

This datasheet consists of four pages:

- Page 1: Information on the most relevant hazards related to the occupation.
- Page 2: A more detailed and systematized presentation on the **different hazards** related to the job with indicators for preventive measures (marked as and explained on the third page).
- Page 3: Suggestions for **preventive measures** for selected hazards.
- Page 4: **Specialized information**, relevant primarily to occupational safety and health professionals and including information such as a brief job description, a list of tasks, notes and references.

Who is a dairy farmer?

A farmer whose main job is to milk and tend cows

What is dangerous about this job?

- Dairy farmers have to work in close contact with animals, which results in both a high risk of accidents as well as a high risk of occupational diseases due to irritants of animal origin.
- Also, in general, environmental factors in cowsheds or in milking parlors are not optimal for workers.
- Ergonomic related difficulties are common and result from bad working postures, repetitive movements and forceful exertions.

Hazards related to this job

Specific preventive measures can be seen by clicking on the respective in the third column of the table.

Accident hazards 	<ul style="list-style-type: none"> • Risk of severe bruising or crushing injuries when handling animals (kicking, butting, crushing, tramped on). 	
	<ul style="list-style-type: none"> • Slips, trips and falls (on stairs or on the level) while carrying out various tasks in buildings or outside buildings (restricted space, sharp obstacles, slippery surfaces, ice in winter) 	
	<ul style="list-style-type: none"> • Mixing and pumping manure may cause workers and animals to be exposed to high concentrations of poisonous gases (hydrogen sulfide (H₂S), carbon dioxide (CO₂), ammonia (NH₃), methane (CH₄)) 	
	<ul style="list-style-type: none"> • Low concentrations of oxygen (O₂) and high concentrations of nitrogen dioxide (NO₂) or carbon dioxide (CO₂) create risks of suffocation and poisoning when working in silos. 	
Physical hazards 	<ul style="list-style-type: none"> • Exposure to high noise levels from mills and mixers, milking equipment and animals 	
	<ul style="list-style-type: none"> • Drafts and low temperatures in cold barns 	
Chemical hazards	<ul style="list-style-type: none"> • Eye and nose irritation from ammonia (NH₃); nervous symptoms, headache, eye irritation and numbing of the sense of smell by hydrogen sulfide (H₂S) 	
	<ul style="list-style-type: none"> • Dermatitis and respiratory tract irritation caused by rinsing, cleaning and disinfecting agents and 	

	their vapors.	2	5
	<ul style="list-style-type: none"> Eye and respiratory tract irritation caused by silage additives (formic acid). 	2	5
Biological hazards 	<ul style="list-style-type: none"> Respiratory and systemic symptoms from exposure to mouldy material may cause the development of farmer's lung disease (FLD). 	2	6
	<ul style="list-style-type: none"> Organic dust toxicity syndrome (ODTS), acute and chronic bronchitis, occupational asthma, chronic obstructive pulmonary disease, eye irritation, dermatitis by exposure to organic respirable dusts (animal dust, dust from feed and bedding, hay and grain dust) 	2	6
	<ul style="list-style-type: none"> Zoonoses (intestinal diseases, respiratory disorders, dermatoses common to both man and animal) by direct or indirect contact with diseased animals, manure, urine and bedding, or through animal products or contaminated water, soil or plants. 	2	
Ergonomic, psychosocial and organizational factors 	<ul style="list-style-type: none"> Back pain and other musculoskeletal problems resulting from bad working postures, repetitive movement and forceful exertion while handling animals, lifting bales, feed bags, manually loosening and transporting silage, manually removing manure, milking and other tasks. 	7	
	<ul style="list-style-type: none"> Discomfort, decreasing work efficiency and safety resulting from poor illumination 	7	
	<ul style="list-style-type: none"> Exposure to noxious smells from manure, urine and gases. 	2	
	<ul style="list-style-type: none"> Psychological stress due to responsibility for high economic values and animal welfare, working alone, unexpected events (sick animal, machinery breakdown), fast paced work in milking stations and bad working conditions (noise, lifting heavy loads, bad working postures, dust, drafts) 	8	

Preventive measures

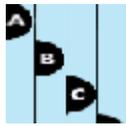
- 1 Construct buildings and develop working methods that will separate the worker from the animal, especially when moving animals
- 2 Use appropriate personal protective equipment (incl. clothing).
- 3 Use slip-resistant footwear. Keep passages clean.
- 4 Ventilate properly. Do not work alone.
- 5 Read and follow safety instructions supplied on product label.
- 6 Use methods which will prevent materials from growing moldy during storage. Handle mouldy and dusty materials last, before leaving the building. Moisten mouldy and dusty material before handling it. Ventilate properly.
- 7 Physically exercise during breaks. Mechanize heavy phases of work.
- 8 Acquire sufficient skills for operation.

Specialized information

Synonyms Milker

Definitions Performs any combination of the following tasks on dairy farms: Washes and sprays cows with water, insecticides and repellants. Flushes, brushes and scrapes refuse from walls and floors to minimize infestation. Examines cows to detect estrus, injuries and

and/or description



disease. Administers prescribed treatments and reports problems requiring veterinary attention. Loosens silage or takes baled silage out of silo or store and transports and distributes silage. Weights, loads, grinds, mixes and distributes feed. Removes manure from barn manually or by using a manure removal system, a tractor and a scraper. Replaces bedding in stalls. Herds cows from milking parlor to pasture. Loads animals to be sold onto trucks. Milks cows by hand and using milking machine. Cleans and sterilizes milking equipment. May maintain dairy buildings and equipment. May maintain data, such as breeding and cost records.

Related and specific occupations

Milking machine operator

Tasks

Administering (treatments); attaching; brushing; carrying; cleaning; cutting (silage); distributing; driving; examining; feeding; forking; grinding; herding; lifting; loading; loosening (silage); maintaining (equipment, data, records); milking; mixing; operating (equipment); pulling and pushing; removing; repairing; reporting; scraping; shoveling; spraying; sterilizing; transporting; washing; weighting

Primary equipment used

Milking machine; automatic washer; mills; feed mixer, feed conveyors; feeding wagons; automatic feeder; silage cutter; forks; brushes; shovels; scrapers; power washer; vacuum cleaner; tractor and loader; skid loader

Workplaces where the occupation is common

Farms

References



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Gustafsson, B., Lindgren, G. & Lundqvist, P. 1991. Near-Accidents in Agriculture. A survey of Swedish studies. Swedish J. Agric. Res. 21: 85-93.

Palonen, J., Oksanen, E.H. 1995. Labour and Technology in Milk Production. Report of CIGR Working Group 17. TTS-Institute's Publications Series. Helsinki