

International Hazard Datasheets on Occupation




Animal Handler

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 animal handlers 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, 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  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 an animal handler?

A worker who attends animals (mice, canaries, guinea pigs, mink, dogs, monkeys, etc.) on farms and in kennels, pounds, hospitals, and laboratories. He/she does a wide range of jobs in order to keep the animals healthy and fit for the purpose for which they are being kept - like medical experiments, breeding, or humane purposes. Besides attending the animals themselves, an Animal Handler takes care of the facilities where are being kept and does various related jobs

What is dangerous about this job?

- Animal Handlers may suffer from traumas (kicks, bites, scratches, etc.) caused by animals, which may sometimes be dangerous to life.
- Animal Handlers may contract from the animals in their care many infectious diseases that are common to animals and man.
- The Animal Handlers' work is often physically difficult and involves handling heavy loads, uncomfortable postures and movements. This may cause injuries (including falls), back, arms and hands pains.
- Animal Handlers often use various animal drugs and other chemicals, which may be dangerous to their health.
- The Animal Handlers' work sometimes may be monotonous and annoying.

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">• Falls from horses and other riding animals	
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Slips, trips and falls (on slippery surfaces, stairs, etc.)	
• Struck by falling objects during handling	
• Electric shocks caused by defective or incorrectly operated equipment	
• Cuts and pricks caused by sharp objects, broken glass and syringes	
• Bites, goring and/or being attacked by domestic or wild animals	
• Kicks, bites, scratches and stings caused by laboratory animals (primates, dogs, cats, rabbits, guinea pigs, rats, mice, hamsters and other rodents, snakes, wasps, etc.), domestic animals, fur animals, honeybees, zoo animals, and other animals	
• Burns from hot metal objects (e.g., while branding farm animals)	
• Fires caused by flammable materials	
• Explosions of animal-food dust / air mixtures	

Physical hazards





• Exposure to ionizing radiation emitted by veterinary X-ray equipment and from laboratory animals investigated or treated with radioisotopes and from their secretions	
• Exposure of skin and eyes to ultraviolet radiation used for sterilization and other purposes in laboratories and animal quarters	1
• Exposure to excessive noise, heat stress and hand-arm vibrations during forging and related operations (in farriers)	
• Cold or heat stress (resulting in effects ranging from temperature discomfort to frostbite or heat stroke, respectively) and exposure to frequent abrupt temperature changes (when entering or leaving climate-conditioned rooms)	
• Health problems (e.g., rheumatic, etc.) due to specific conditions existing in the animal quarters, such as high humidity, winds, concrete floors, etc.	

Chemical hazards



• Intoxication due to contact with chemicals, such as pesticides (esp. insecticides, germicides, and herbicides), solvents, strong acids and alkalis, detergents, etc.	
• Dermatoses due to contact with chemicals, such as pesticides, solvents, detergents, deodorants, animal medications, etc.	2
• Allergies due to contact with formaldehyde and other allergenic substances	
• Inhalation of formaldehyde vapors may cause membrane irritation, skin irritation, asthma and potentially sino-nasal carcinoma	5
• Health hazards caused by exposure to metallic, solvent, and other fumes during forging, shoeing and other hoof-care operations (esp. in farriers)	
• Systemic and gastrointestinal effects caused by exposure to cytotoxic agents (esp. in laboratory animal handlers)	
• Exposure to various carcinogenic, mutagenic and teratogenic agents (esp. in laboratory animal handlers)	

	<ul style="list-style-type: none"> Use of latex gloves while handling animals may cause latex sensitization leading to dermatitis, asthma or anaphylaxis 	3
Biological hazards 	<ul style="list-style-type: none"> Infection due to contact with sick or pathogen-carrying animals, or from exposure to airborne pathogens, resulting in development of communicable diseases (zoonoses) 	4
	<ul style="list-style-type: none"> Laboratory-animal allergies (LAA) (including: occupational asthma, allergic alveolitis, bronchitis, pneumonitis, rhinitis, skin rashes, etc.) and diseases of the airways caused by inhalation of animal-food dust, containing various microorganisms and their spores, animal hair (causing furrier's lung), bird-droppings residues (causing pigeon-breeder's lung), etc. 	
	<ul style="list-style-type: none"> Pulmonary dysfunctions in animal confinement workers caused by various etiologic agents, including hydrogen sulfide toxicity, bronchitis, non-allergic asthma, organic-dust toxic syndrome, mucus membrane irritation, and by bioaerosols and endotoxins 	
	<ul style="list-style-type: none"> Dust and endotoxin-related respiratory effects in animal-feed workers and in fur-farm workers 	5
	<ul style="list-style-type: none"> Exposure to carcinogenic aflatoxins (causing primary liver cancer), in animal-feed workers 	
	<ul style="list-style-type: none"> Acute health effects caused by various flea-control products used by animal handlers 	
	<ul style="list-style-type: none"> Increased risk of laboratory-acquired HFRS (hemorrhagic fever with renal syndrome) caused by infected laboratory rats 	
	<ul style="list-style-type: none"> Occupational eczemas and contact dermatitis 	2
	<ul style="list-style-type: none"> Increased risk of developing chronic lymphatic leukemia (CLL) and non-Hodgkin's lymphoma (NHL) in animal breeders 	
	<ul style="list-style-type: none"> Various septic infections 	
	Ergonomic, psychosocial and organizational factors 	<ul style="list-style-type: none"> Musculoskeletal problems (particularly of back and knees) in animal handlers engaged in lengthy horse-riding and/or leaning on their knees (esp. on concrete floors) during work (e.g., in farriers)
<ul style="list-style-type: none"> Job dissatisfaction related to the working environment (dirt, smells, etc.) and to the mainly physical character of work 		
<ul style="list-style-type: none"> Exposure to attacks by cattle robbers, valuable-pet thieves, etc. 		6
<ul style="list-style-type: none"> Exposure to violence on the part of extremist groups (claiming to be "struggling for animals' rights", etc.) 		
<ul style="list-style-type: none"> Danger of developing addiction to drugs, facilitated by easy availability of animal medications 		

Preventive measures

Wear safety spectacles with UV protection lenses

1

2

Protect hands with chemical-resistant gloves; if impractical, use a barrier cream

3

Provide latex-free gloves for workers with latex allergy

4

Avoid contact with sick animals; if necessary, consult safety professional and apply safety precautions for biohazards

5

Wear a respirator to avoid inhalation of dust, gases, or aerosols

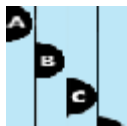
6

Train employees how to recognize and respond to threat of violence; provide alarm or other means for summoning help, or escort if needed

Specialized information

Synonyms Animal attendant; animal breeder; animal caretaker; animal husbandryman; animal keeper; animal laboratory worker; animal raiser; farmworker, animal; farmworker, livestock; etc.

Definitions and/or description Performs any combination of following duties to attend animals, such as mice, canaries, guinea pigs, mink, dogs, and monkeys, on farms and in facilities, such as kennels, pounds, hospitals, and laboratories: Feeds and waters animals according to schedules. Cleans and disinfects cages, pens, and yards and sterilizes laboratory equipment and surgical instruments. Examines animals for signs of illness and treats them according to instructions. Transfers animals between quarters. Adjusts controls to regulate temperature and humidity of animals' quarters. Records information according to instructions, such as genealogy, diet, weight, medications, food intake, and license number. Anesthetizes, inoculates, shaves, bathes, clips, and grooms animals. Repairs cages, pens, or fenced yards. May kill and skin animals, such as fox and rabbit, and pack pelts in crates. May be designated according to place worked such as Dog-Pound Attendant (government ser.); Farm worker, Fur (agriculture); Helper, Animal Laboratory (pharmaceut.); Kennel Attendant (agriculture); Pet Shop Attendant (retail trade); Veterinary-Hospital Attendant (medical ser.) [DOT]



Related and specific occupations Abattoir worker; animal hairdresser; animal herder; animal shelter supervisor; apiarist; artificial inseminator; beekeeper; cattleman; cowboy; farmworker; fur farmer; herder; lamber; livestock rancher; livestock yard attendant; milker; pelter; shepherd; stable attendant; stock raiser; supervisor, kennel; veterinarian; zoo attendant / worker; etc.

Tasks Administering; anesthetizing; applying (medications); apportioning; assisting (veterinarian); attending; bathing; bedding; binding; breeding; bridling; brushing; building (fences, sheds, etc.); bundling; buying and selling; caging; calculating; caring; carrying; castrating; catching; cleaning; collecting (fees, donations, etc.); combing; confining; corralling; cultivating; culturing; delivering; demonstrating; disinfecting; distributing; domesticating (animals); drenching; dressing; driving; examining (animals); exercising; exhibiting; exterminating; farming; fattening; feeding; filling; foddering; formulating; fumigating; gathering; grazing; greasing; grinding; grooming; growing; guarding; guiding; handling; harnessing; harvesting; hauling; helping; herding; hitching (animals); identifying; incubating; injecting; inoculating; inseminating; inspecting; investigating; isolating; keeping; killing; labeling; littering; loading and unloading; maintaining; managing; marking; measuring; medicating; milking; mixing; mounting and dismounting; moving; netting; nurturing; observing; pacifying; planting; preparing; pricking; purchasing; quarantining; racking; raising; ranching; rearing; recording; repairing; replenishing; reporting; restraining; riding; rounding up; saddling; scraping; segregating; selecting; separating; shaving; shipping; shearing; shoeing; skinning; sorting; sowing; spawning; spraying; spurring; sterilizing; stocking; storing; stripping; supervising; tagging; taming; tattooing; tending; training (e.g., police dogs); transferring; transporting; treating; tying; vaccinating; walking (dogs); washing; watering; weighing; whipping;

Primary equipment used

Type and variety of equipment is dependent on the specific type of animal to be raised or taken care of and the type of premises where it is housed. Some general types of equipment commonly used are the following: anesthetizing, cleaning, disinfecting, spraying or sterilizing equipment; general farm working tools; caging, holding and restraining equipment; building and carpentry equipment; shaving, cutting and grooming equipment; packaging and crating equipment, including ropes, straps, harnesses, etc; tagging and marking equipment; tools and machinery for loading, hauling and transporting; etc.

Workplaces where the occupation is common

Abattoirs; animal farms; animal breeders and raisers outfits; biological, pharmaceutical and medical laboratories; dog pounds; kennels; fishing farms; fur farms; pet shops; university animal-houses; veterinary hospitals; zoos

Notes



Sporadic cases of the mad-cow syndrome (viral) disease in the UK, has created public scare and resulted in various limitations on meat export from the UK; animal handlers must be aware of the potential hazards involved

References

Guide to Health and Hygiene in Agricultural Work, ILO, Geneva, 309 pp., 1979.



Disposal of Potentially Contaminated Animal Wastes, Data Sheet I-679 Rev.90, NSC (USA).

Zenz, C.: Occupational Medicine, 3rd Ed., Mosby Publ. Co., 1994 pp. 883-902 and p.1218.

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