

International Hazard Datasheets on Occupation



Nurse, emergency room

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 nurse, emergency rooms 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 as numbered shields 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.

Production of this hazard hatasheet was sponsored by Israel Institute for Occupational Safety and Hygene






Who is an emergency room nurse?

An emergency room nurse is a healthcare worker who is a qualified nurse and works in the emergency room of a hospital or other healthcare institution.

What is dangerous about this job?

- Emergency room nurses use cleaning, disinfecting, and sterilizing agents that may damage the skin, mucous membranes, and respiratory system.
- Emergency room nurses may be exposed to anesthetic gases, drugs, and radiation.
- Emergency room nurses may be injured by sharp objects (needles, blades, etc.).
- Contact with hot surfaces, faulty electrical equipment, etc. may cause skin burns.
- Sick patients in the emergency room present a risk of infection from body fluids.
- Emergency room nurses may suffer from musculoskeletal problems and back pain resulting from the handling of heavy patients. Continuous work while standing or walking causes fatigue and leg problems.
- Emergency room nurses may suffer from stresses and burnout caused by shift and night work and by other psychological and organizational factors.

Hazards related to this job

Accident hazards 	<ul style="list-style-type: none"> Slips, trips, and falls on wet floors, especially during emergency situations. 	1
	<ul style="list-style-type: none"> Stabs and cuts from sharp objects, especially needle-sticks and cuts by blades. 	2
	<ul style="list-style-type: none"> Burns and scalds from contact with hot sterilizing equipment or hot water and steam pipes. 	
	<ul style="list-style-type: none"> Electrical shock from faulty or improperly grounded equipment or equipment with faulty insulation. 	3 4
	<ul style="list-style-type: none"> Injuries to legs and toes caused by falling objects, e.g., medical instruments. 	1 5
<ul style="list-style-type: none"> Acute back pain resulting from awkward body position or overexertion when handling heavy patients. 		
Physical hazards 	<ul style="list-style-type: none"> Exposure to radiation from x-ray and radioisotope sources. 	6
Chemical hazards 	<ul style="list-style-type: none"> Skin defatting, irritation, and dermatoses because of frequent use of soaps, detergents, disinfectants, etc. 	
	<ul style="list-style-type: none"> Irritation of the eyes, nose, and throat because of exposure to airborne aerosols or contact with droplets of washing and cleaning liquids. 	7 8
	<ul style="list-style-type: none"> Chronic poisoning because of long-term exposure to medications, sterilizing fluids (e.g., glutaraldehyde), anesthetic gases, etc. 	7
	<ul style="list-style-type: none"> Latex allergy caused by exposure to natural latex gloves and other latex-containing medical devices. 	9
Biological hazards 	<ul style="list-style-type: none"> Infections due to the exposure to blood, body fluids or tissue specimens possibly leading to blood-borne diseases such as HIV, Hepatitis B and Hepatitis C. 	10 11 12 13
Ergonomic, psychosocial and organizational factors 	<ul style="list-style-type: none"> Fatigue and lower back pain due to the handling of heavy patients and to long periods of work in a standing posture. 	14
	<ul style="list-style-type: none"> Stress, strained family relations, and burnout due to shift and night work, overtime work, and contact with sick patients, especially accident victims and their relatives. 	
	<ul style="list-style-type: none"> Exposure to severely traumatized patients, multiple victims of a disaster or catastrophic event or severely violent patients may lead to post-traumatic stress syndrome. 	15

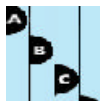
Preventive measures

- 1 Wear shoes designed for nurses, with non-slip soles.
 - 2 Handle sharp objects with extreme care; use special safety receptacles to store used hypodermic needles until disposal. Use safety needles if available.
 - 3 Install ground fault circuit interrupters; call qualified electrician to test and repair faulty or suspect equipment.
 - 4 Comply with all safety instructions on the installation and periodic inspection of electrical medical equipment.
 - 5 Keep all passages clearly visible and uncluttered.
 - 6 Wear a radiation dosimeter (badge or other) when exposed to radiation; comply with all safety instructions to reduce exposure to a minimum.
 - 7 Install air conditioning with effective general ventilation in the emergency room to alleviate heat stress and remove odors, gases and vapors.
 - 8 Provide eye wash bottles or fountains.
 - 9 Nurses sensitive to natural rubber latex must use powder-free latex or non-latex gloves and avoid contact with other latex products.
 - 10 Follow established appropriate infection control precautions assuming blood, body fluids and tissue are infectious
 - 11 Routinely use barriers (such as gloves, eye protection (goggles or face shields) and gowns)
 - 12 Wash hands and other exposed skin surfaces after coming into contact with blood or body fluids
 - 13 Follow appropriate procedures in handling and disposing of sharp instruments or needles
 - 14 Provide lifting aids for the lifting and transport of heavy patients; consult an occupational safety specialist on the safe handling of heavy patients.
 - 15 Procedures and counselling services should be available to workers exposed to post-traumatic stress syndrome
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Specialized information

Synonyms Nurse, first-aid

Definitions and/or description



A professional nurse who handles patients that are accepted into the emergency room. Delivers first-aid to the patient, prepares him for inspection by the emergency-room physician on-duty, undresses him, measures his pulse-rate, temperature, blood pressure and performs any other necessary examination; assists the physician in checking the patient and delivers the treatment that was decided by the physician, including disinfecting and bandaging wounds and bruises, smearing ointments, dispensing medications, connecting the patient into infusions, etc., as necessary.

Related and specific occupations

Other patient-care nursing occupations classified according to ward (operating room nurse, intensive-care nurse, pediatric nurse, etc.); emergency medical technician; emergency medical service coordinator; first aid attendant

Primary equipment used

Catheters; masks; medical supplies (scalpels, syringes, needles, bandages, gauze, sterile pads, plaster dressings, etc.); monitoring equipment; sterilization equipment; stethoscope; sphygmomanometer; thermometers; watch

Workplaces where the occupation is common

Emergency rooms of hospitals and other health care institutions

References

Encyclopaedia of Occupational Health and Safety, 4th Ed., ILO, Geneva, 1998, Vol.2, p. 39.18.



Encyclopaedia of Occupational Health and Safety, 3rd Ed., ILO, Geneva, 1983, Vol.2, p. 873-877.

Occupational Disease - a Guide to their Prevention. DHEW- NIOSH Pub. 77-181,1977 (Multiple pages - see entry "Nurses" in index).

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