International Hazard Datasheets on Occupation

Nurse, pediatric

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, pediatrics 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 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 pediatric nurse?

A pediatric nurse is a healthcare worker who is a professional registered nurse and assists medical doctors in their tasks, deals with emergencies in their absence, and provides professional nursing care for sick babies and children in the children's ward of a medical institution.

What is dangerous about this job?

- Pediatric nurses are exposed to practically all of the acute hazards existing in the healthcare institutions where they work.
- Pediatric nurses may be exposed to infectious diseases due to direct contact with patients.
- Pediatric nurses may be exposed to anesthetic gases, drugs, and radiation.
- Pediatric nurses use cleaning, disinfecting, and sterilizing agents that may damage the skin, mucous membranes, and respiratory system.
- Pediatric nurses may be injured by sharp objects (needles, blades, etc.)
- Contact with hot surfaces, faulty electric equipment, etc. may cause skin burns.
- They may suffer from musculoskeletal problems and back pain from carrying babies and children. Continuous work while standing or walking causes fatigue and leg problems.
- Pediatric nurses may suffer from stresses and burnout caused by shift work, night work, and by other psychological and organizational factors.

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	• Injuries to legs and toes caused by falling objects, e.g., medical instruments.	1
	• Slips, trips, and falls on wet floors, especially during emergency situations.	1
	• Stabs and cuts from sharp objects, especially needle-pricks and cuts by blades.	2
	• Burns and scalds from contact with hot sterilizing equipment, hot water and steam pipes, hot food spilled while feeding children, etc.	
	• Electrical shock from faulty or improperly grounded equipment, or equipment with faulty insulation.	3 4
	• Acute back pain resulting from awkward body position or overexertion when carrying children.	

	• Acute poisoning due to accidental release of a chemical agent.	
Physical hazards	• Exposure to radiation from x-ray and radioisotope sources [See Note].	5
	• Exposure to UV radiation, including radiation from lasers.	
Chemical hazards	• Various potential hazards caused by chemicals available in the ward, due to unforeseen behavior of the children.	
	• Skin defatting, irritation, and dermatoses because of frequent use of soaps, detergents, disinfectants, etc.	
	• Irritation of the eyes, nose, and throat because of exposure to airborne aerosols or contact with droplets of washing and cleaning liquids.	6 7
	• Chronic effects because of long-term exposure to medications, iodine, sterilizing fluids (e.g., glutaraldehyde), anesthetic gases, antibiotics, antiseptic materials, etc.	6
	• Respiratory effects of talc used to dust gloves and diapers.	
	• Latex allergy caused by exposure to natural latex gloves and other latex-containing medical devices.	8
Biological hazards	• Risk of contracting an infectious disease (including gastrointestinal diseases, caused by parasites and worms) due to close contact with sick children and their excreta and purulent discharges.	
	• 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.	9 10 11 12
	• Eye inflammation that results in allergenic sensitivity.	
Ergonomic, psychosocial and organizational factors	• Fatigue and lower back pain due to carrying children and to long periods of work in a standing posture.	13
	• Stress, strained family relations, and burnout due to shift and night work, overtime work, and contact with sick children.	
	• Exposure to severely traumatized patients, multiple victims of a disaster or catastrophic event or severely violent patients may lead to post-traumatic stress syndrome.	14

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. Wear a radiation dosimeter (badge or other) when exposed to radiation; comply with all safety instructions to reduce exposure to a minimum.
6. Install air conditioning with effective general ventilation to reduce heat stress and remove odors, gases, and vapors.

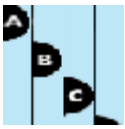
7. Provide eye flushing bottles or fountains.
8. Nurses sensitive to natural latex must use non-latex gloves and avoid contact with other latex products.
9. Follow established appropriate infection control precautions assuming blood, body fluids and tissue are infectious
10. Routinely use barriers (such as gloves, eye protection (goggles or face shields) and gowns)
11. Wash hands and other exposed skin surfaces after coming into contact with blood or body fluids
12. Follow appropriate procedures in handling and disposing of sharp instruments or needles
13. Provide lifting aids for the lifting and transport of heavy patients; consult an occupational safety specialist on the safe handling of heavy patients.
14. Procedures and counselling services should be available to workers exposed to post-traumatic stress syndrome

Specialized information

Synonyms

Children nurse; nurse, professional/pediatric; nurse, associate professional/pediatric; nurse, children's (domestic ser.)

Definitions and/or description



A pediatric nurse is a professional registered nurse who assists medical doctors, and esp. pediatricians, in their tasks, deals with emergencies in their absence, and provides professional nursing care for sick babies and children in a children's ward in a medical institution. Responsible for dispensing medication, carrying out required injections and medical examinations, and for maintaining the health of the children in the ward. Responsible for the washing, cleaning, dressing and undressing, and feeding of the children; helps the children to execute all necessary physical activities, including cleaning after vomiting, defecation, etc. Also, helps children in their studies.

Related and specific occupations

Other patient-care nursing occupations classified according to ward, e.g. operating-room nurse, intensive-care nurse, midwife nurse, etc.

Primary equipment used

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

Workplaces where the occupation is common

Various pediatric wards in hospitals and other health care institutions; special pediatric hospitals

Notes

The dose accumulated by a nurse, as a result of close contact with the treated children while holding them during the radiation treatment, may exceed the permissible radiation dose. This is especially true in the event of children that are subjected to radioactive tests and radiotherapy.

References

Encyclopaedia of Occupational Health and Safety, 3rd Ed., ILO, Geneva, 1983, Vol.2, p. 1480-1482.

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

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