
	Northwest General Hospital A Project of Alliance Healthcare Limited		
	Infection Prevention and Control Committee		
	NWGH WASTE MANAGEMENT Policy		
ISSUE #: 01	DOC #:NWGH/IPCC-002	ISSUE DATE: 30-05-18	

NORTHWEST HOSPITAL WASTE MANAGEMENT

INTRODUCTION/PURPOSE

The procedures described in this policy are necessary to ensure that both infectious and non-infectious wastes generated at Northwest General Hospitals (NWGH I & II) are collected, transported, stored and dispose off in such a manner as to:

1. Minimize the health risk to patients, staff and the public at large
2. Identify and segregate infectious and non infectious wastes at generation point
3. Reduce the possible risk of infection transmission during handling, transportation and disposal of hospital waste

SCOPE OF THE POLICY



The policy covers all waste management related activity within the Northwest General Hospitals;

1. Procedures relating to specific areas of waste management
2. The policy covers all staff employed by the NWGH generating waste as part of NWGH Healthcare business and not just those with a specific responsibility for waste management
3. The policy relates to all suppliers, contractors and sub-contractors who have specific roles to play in the management of the NWGH waste

POLICY OBJECTIVES

It is the policy of Alliance Healthcare management to implement procedures to ensure the safe segregation, handling, transportation, storage and final disposal of all waste streams.

- Limit waste production using the waste management policy and segregate all waste streams to ensure legal compliance, minimize environmental impact and keep operational costs to a minimum
- Train staff in accordance with the Waste Management Policy and procedures to ensure legal compliance and best practice.
- Ensure this policy and procedures conform with the requirements of the Infection Control Policy.

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KEY PRINCIPLES OF THE ASSOCIATED WASTE PROCEDURE ARE:

Waste Assessment

All waste types will be assessed by NWGH staff (clinical & non clinical) prior to its collection for disposal. Identification criteria include quantity, its risk/hazard properties and clinical waste categories (given below).

Waste Segregation

Waste will be segregated at source and in some cases stored/transported separately from other waste types to meet legal compliance.

Waste Handling & Storage

Methods of safe handling and appropriate storage of waste will be determined by its risk assessments. Key principles to be adopted include minimising manual handling, ensuring no cross contamination of waste, storing waste in secure areas and ensuring hazards of all kinds are eliminated where appropriate and reasonably practicable

Waste Collection & Duty of Care

Duty of care of the external waste contractors will be ensured through monitoring by the manager responsible for initiating the waste collection arrangement.

CLINICAL WASTE CATEGORIES:

The clinical waste is normally divided into the following categories;

1. Group A

- a. Soiled surgical dressings, swabs and all other contaminated waste from clinical/ treatment area.
- b. Material other than linen from cases of infectious diseases
- c. All human tissues (infectious or non-infectious) and tissues from laboratories and all related swabs and dressings

2. Group B

- a. Consists of disposable syringes, needles, cartridges, broken glasses and any other sharp instruments

3. Group C



- a. Relates to post mortem room, laboratory waste included in group A

4. Group D

- a. Includes certain pharmaceutical and chemical waste that is unused or partially used and other medical products

5. Group E

- a. Comprises of used disposable items contaminated with organic material, linen, urine contents, pads, stoma bags, etc.

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DEFINITIONS:

Infectious waste

Control Disease Center (CDC) defined infectious waste as “Waste that in all probability contains pathogenic agents that, because of their type, concentration and quantity may cause disease in person exposed to waste”

In Inpatient, Laboratory and at other research related areas, the infectious item should be segregated and put in red plastic bags. These bags should be handled with care by those who are responsible to transport the same to ultimate disposal points.

General waste

It consists of items which have no infection problem and could be handled without too much care, if at generation point, proper segregation procedure practiced.

Waste Disposal System

The waste handling system consists of the following:

1. Handling at the point of production
2. Transportation within the facility
3. Internal storage
4. Internal treatment/incineration
5. Ultimate disposal

Northwest General Hospital provides all types of services to the patient, and being a tertiary care hospital, all types of waste described above are being generated.

Approved procedures for handling and transportation of hospital waste must be followed.

Sources of waste

1. Waste generated by NWGH
2. Waste generated by the Patient and staff Canteen/Kitchen

WASTE GENERATED BY NORTHWEST GENERAL HOSPITAL (NWGH)

Clinical Waste (Infectious)



Waste from wards patient’s rooms, Laboratories, Operation theatres and Minor OT should be disposed of in YELLOW BAGS

Domestic Waste (Non Infectious)

Waste from offices and service areas should be disposed in WHITE BAGS

Kitchen Waste

Tins and other solid materials i.e. wood pieces and cardboard boxes, bottles, left over food, fruit and vegetable peeling, etc. should be disposed in BLACK BAGS

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WASTE HANDLING

The safe handling procedures are dependent upon the effectiveness of segregation procedures



- a. The procedures for the segregation of infectious and non infectious waste should be exercised at ward level/waste generation point.
- b. Doctors, nurses and other health care workers who have knowledge and capability of identifying infectious and non-infectious waste should segregate the waste carefully at the generation point.
- c. Designated color coded bags be used for effective segregation, easy transportation and incineration.
- d. Waste from isolation rooms should be double bagged in RED PLASTIC BAG and be removed daily.
- e. Disposable syringes, needles and sharp edged items should be disposed in the puncture resistant sharps containers. These containers should not be overfilled or emptied for reuse.
- f. Contaminated waste should be discarded in the RED PLASTIC BAGS
- g. Solids like tissue papers, cotton, etc. are to be removed and disposed in white waste bags in the soiled utility room.
- h. All waste bags should be handled carefully in a way that prevents injury from sharps or other physically dangerous contacts.
- i. Waste bags should never be thrown, kicked or dragged on the floor

Biohazard or Infectious Waste Handling Procedures

BIOHAZARD OR INFECTIOUS WASTE:

Infectious waste presents a health risk. Because of this, the procedures used to collect; handle and dispose of such waste are those that control the transmission of infectious agents.



- A. Biohazard of infectious waste includes:
 - a. Waste that originates from the care and treatment of a patient who is ill due to an infectious agent or who is suspected of being infected and capable of transmitting infectious agent must be segregated at generation point and should be disposed in RED BAG by using two red bags (double bagged)
 - b. All used needles and sharps regardless of their infectious status must be disposed in puncture resistant sharps container available in all patient care areas.
 - c. Tissues removed during surgical procedures regardless of the infected nature
 - d. Waste contaminated with human faecal matter must be properly disposed off for incineration
 - e. Waste that the hospital Infection Control committee defines as infectious waste must be properly decontaminated by an approved process i.e. autoclave before disposal.
- B. Infectious waste can be stored if required due to heavy load on the hospital incinerator in a walk in refrigerator.

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- C. All infectious waste must be destroyed by incineration.
- D. Biohazard or infectious waste bags and the sharp disposal boxes must be handled in a manner to prevent to spillage or contaminate the handler.
- E. Incidents involving spillage from the infectious waste disposal bags or the sharp disposal boxes or injuries resulting from their handling must be reported to Infection Control Nurse (ICN).

NON-INFECTIOUS WASTE HANDLING PROCEDURES

- A. Normal (non-biohazard infectious) waste presents a minimal health risk. Because of this, the procedure used to collect, handle and dispose off such waste are those that promote general safety and sanitation condition.
- B. Normal waste containers should be lined with a white plastic waste bag
 - a. Used blood transfusion bags and tubing's from all cases should be placed in white plastic waste bags and return to Blood Bank
 - b. Intravenous Infusion bags and tubing's from non-isolation area
 - c. Urine bags and containers from all cases should be emptied into the sewer and then discarded in the normal waste bags.
 - d. Glass products which have not been in contact with communicable infectious agents should be placed in normal waste bags.
 - e. Broken glass and large sharp items should be placed in a cardboard box prior to discarding it in the normal waste bags.
- C. Normal waste may be emptied from one container into another. This practice should be limited to offices and other non-critical area.
- D. Cardboard boxes or other large packing materials may be transported in carts without being placed inside a bag.
- E. Normal waste when stored for final disposal must be kept in sturdy containers, located in an approved storage facility. To prevent access to weather, unauthorized persons or animals. The final waste disposal facility must be properly maintained and cleaned.

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TRANSPORTATION OF WASTE WITHIN THE HOSPITAL FACILITY

NWG Hospital waste after segregation at generation point should pass through the following procedure to transport the same from generation point to the ultimate disposal point.

Infectious Waste

The Infectious waste and bio-hazards waste should be transported in the following manner:

- a. All bio-hazards waste whether it is from nursing stations, treatment rooms, laboratory, and operating theatres should be double bagged in Red plastic bags and sealed. These bags will be then transported to its final disposal point.
- b. Broken glasses, syringes, needles and other sharp objects placed in a strong proof hard puncture board carton, top lid of these cartons should be sealed in Red plastic bags to avoid spillage and it must be transported in closed containers.

Non- Infectious Waste

- a. Tins, wood, card board boxes and other solid waste should be transported in open or closed containers.
- b. Non infectious waste should also be transported in open or closed containers
- c. It is important that infectious and non- infectious waste bags should be separately transported to avoid mix up.
- d. At the loading dock, normal waste should be carefully placed into the contractor truck

INTERNAL STORAGE



Once the segregation and transportation of the waste is done, internal storage of bio-hazards and non-hazardous becomes easy. Waste should be stored as follows:

- a. Bio-Hazards waste in Red Bags
- b. Infected waste in Yellow bags
- c. Non-hazardous waste in white bags
- d. Tin, wood, cardboards, cartons and other miscellaneous solids in White bags
- e. Kitchen waste in black bags

The bio-hazardous waste should be stored in designated secured areas. Non-hazardous waste should be placed inside designated area waiting for disposal. Tins, wood and cardboard/cartons should also be stacked in the corner adjacent to skips.

Internal Treatment (Incineration)

- a. The bio-hazardous waste should be incinerated every other day if done locally.
- b. Confidential papers/documents which are not hazardous can also be incinerated on special requests.

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- c. Syringes, needles and other infectious sharp objects should be incinerated provided they are not heavy and explosive
- d. Contaminated food waste declared to be unfit for human consumption should also be incinerated.

DISPOSAL SYSTEM



- a. All infectious waste must be destroyed by incineration.
- b. All non-infectious waste should be placed in the designated area waiting for pick up by the contractor.
- c. Card board boxes/cartons, tins, wood should be stacked in the open area. These are to be collected by the contractors on daily basis.
- d. Open storage area should be cleaned daily and washed on consecutive days.
- e. Storage and disposal area should be maintained regularly to avoid bad smell and infection problem.
- f. Normal waste must be disposed off in white bags in an appropriate manner.
- g. Sturdy leak proof transport carts should be used to transport waste to the disposal area.

Infectious Waste Handling in the Operating Room

1. The operating room staff is responsible for proper segregation of waste, appropriate use of waste bags and to ensure that the bags are adequately closed prior to removal from the operating room.
2. All waste material generated in the operating room should be double bagged by operating room staff, using the designated two RED PLASTIC WASTE BAGS.
3. All used needles, syringes, blades; etc should be discarded into SHARPS DISPOSAL CONTAINERS.
4. The sharps containers should not be overfilled or emptied for reuse. It must be sealed in red plastic waste bags prior to disposal.
5. Body tissue that needs to be disposed of e.g. adipose tissue should be discarded in the biohazard or infectious waste bags regardless of the infectious nature of the case.
6. Large amount of body fluid removed from the patient should be flushed down on the sewer. If such waste is in a leak proof container and cannot be flushed down the sewer, then it must be discarded in a biohazard or infectious waste bag regardless of the infectious nature of the case.

Infectious Waste Handling in Inpatient Nursing Units and Outpatient Clinics

1. Waste from isolation rooms should be removed daily and more frequently if necessary by double bagging procedure. Using two RED BAGS. Both bags must be tied accurately.
2. The sharps disposal containers should not be overfilled. In addition, the container must be taped shut prior to discarding them in the biohazard or infectious waste bag.
3. All waste materials (e.g. pampers) contaminated with faeces must be discarded in the biohazard or infectious waste bag.

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4. A waste container in the utility room must be lined with a biohazard or infectious RED bag to ensure safe disposal.
5. Biohazard or infectious waste bags (RED) cannot be used for collection of normal waste.

Infectious Waste Handling in Laboratory



1. Specific containers within the laboratory must be provided for the collection of biohazard or infectious waste.
2. Biohazard or infectious waste must be decontaminated by autoclave if possible before incineration.
3. Biohazard or infectious waste that cannot be decontaminated will be discarded in a container lined with a biohazard infectious waste Red bag.
4. The sharps disposal containers within the laboratory must be autoclave. These boxes must then be placed into the biohazard or infectious red bag for incineration.
5. The autoclave process and monitoring procedure must be approved by the Laboratory Safety Officer.

ENVIRONMENTAL SAFETY

1. Containers used for collection of biohazard or infectious waste that will not be autoclave must be lined with the designated biohazard or infectious waste RED BAG.
2. The frequency of daily biohazard or infectious waste collection must correspond to the quantities of biohazard or infectious waste generated to ensure that these bags are not overfilled.
3. All waste bags should be handled carefully at all times.
4. The waste in biohazard or infectious waste bags may not be dumped or in any way or transferred from one bag into another bag.
5. Biohazard or infectious waste bags should be closed securely prior to their removal from the container.
6. The waste bags must be grasped and lifted by knot in the top of the bag and held away from the body to avoid potential contamination of the handler.
7. The waste bags should be removed from their containers and placed directly into the proper transport trolley.
8. All sharp disposal boxes must be placed into the biohazard or infectious waste bag prior to being transported within the hospital.
9. Biohazard or infectious waste bags will remain in the transport trolley during storage in the designated secure near the incinerator.
10. All transport trolley must be cleaned and disinfected after each collection round.
11. The trolley cleaning area must be kept neat and orderly, cleaned on daily basis.

INCIDENT REPORTING

1. Any incident involving spillage of the contents of a biohazard or infectious waste bag should be reported to the Infection control Nurse.

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2. Any injury to personnel resulting from waste handling procedures should be reported to the Infection Control Doctor.
3. Exposure to blood and body fluids as well as needle stick injury must be reported to the Infection Control Doctor.