

Michigan Department of Community Health

RECOMMENDATIONS FOR DEVELOPMENT OF AN ESRD

In recent years, a number of end stage renal disease (ESRD) units have been developed. All the units which have been opened have requested certification from the Department of Health and Human Services. Many of the units are located in freestanding structures and not within an acute care hospital, and are not subject to state licensure rules. To assist owners and designers in developing plans for new construction or renovations of existing structures, the following recommendations are offered.

A. SITE

1. The unit should be served by a community waste water system.
2. Adequate parking sites should be available for patients as well as employees and visitors.
3. Parking spaces for handicapped should provide ready access to the unit.

B. PHYSICAL CRITERIA

1. Building access and work spaces should provide access to handicapped patients and employees.
2. A public toilet room should be provided designed for use by handicappers.
3. A waiting area should be provided near the entry to the unit.
4. Space should be provided to store overcoats and personal effects of patients.
5. Each patient chair space should provide 80 square feet of useable area exclusive of corridor circulation.
6. Each bed station for hemodialysis or peritoneal dialysis should provide 110 square feet of floor space.
7. Each station should be designed to maintain 4'0" between stations.
8. A control or nurse station should be provided for the unit.
9. A medicine area with locked cabinets should be provided.
10. A refrigerator to store medications should be provided.

11. A janitor's closet should be provided within or immediately adjacent to the unit.
12. A clean utility room should be provided.
13. A soiled utility or soiled holding room should be provided.
14. A mechanical room should be provided which is separated from storage functions. The room may contain air handling units, water heaters, water treatment equipment.
15. A workroom should be provided for storing equipment components and to repair equipment.
16. If dialyzers are reused, a separate room should be provided to wash and reprocess dialyzers. ***This room should have a dedicated handwashing lavatory.***
17. Handwashing lavatories should be provided within patient care rooms where invasive procedures take place. A handwashing lavatory should be located within 25 feet of any patient station.
18. Provisions should be available to permit privacy at each patient station.
19. A locker space should be provided for employee use.
20. Office space should be provided for administrative functions.
21. A conference room should be available to the unit.
22. A break room for employee use should be available to the unit. A sink, refrigerator, and microwave oven are recommended for the space.
23. A treatment/exam room may be needed depending on the program carried out within the ESRD unit.

C. ELECTRICAL/MECHANICAL

1. Each patient station should be provided with two duplex electrical outlets. ***A dedicated electrical circuit should be provided for each dialysis machine.***
2. Emergency lighting should be provided for the unit. Battery powered lighting is acceptable.
3. Lighting for rooms should be consistent with the Michigan Department of Community Health, Division of Health Facility Licensing and Certification, Illumination of Health Care Facilities standards (Nov 1984)

4. Ventilation rates for areas should be consistent with the following:

ROOM	AIR CHANGES/HR	Air Movement Relationship Adjacent area	Air Exhausted to outside
Treatment Room	6	- - -	
Clean Holding/Utility	4	Out	
Soiled Holding/Utility	10	In	Yes
Janitor Closet	10	In	Yes
Toilet Room	10	In	Yes
Examination Room	6	- - -	
Conference/Waiting Room	6		
Reprocessing Room	10¹	In	Yes
Dialysate Solution Prep	10	In	Yes

¹Specialized ventilation systems may be required to control toxic fumes. Increase ventilation may be required.

5. The unit should meet appropriate standards in the state electrical code or electrical code adopted by the governing authority.
6. The unit should meet appropriate standards in the State Plumbing Code or code adopted by the authority having jurisdiction. Water distribution systems, including the treated water system, should be designed to eliminate any cross connections.

D. MISCELLANEOUS

1. Provisions should be made for a crash cart and supply of oxygen.
2. Storage should be available for wheelchairs.
3. The unit should make provisions to store and dispose of both general and medical wastes.
4. A telephone should be provided at the nurse's= station.
5. Space should be provided for exterior maintenance items such as snow removal equipment, landscaping equipment, etc., or a contract should be available for these services.
6. Treatment water for the dialysis service should meet criteria set forth in AAMI standards.

7. The building should meet fire safety standards as set forth by the local governing authority.
8. Separate space should be provided for preparation of dialysate solutions.
9. ***Plans and specifications should be submitted to the Health Facilities Engineering Section for review, approval and issuance of a construction permit.***

Questions may be directed to:

**Health Facilities Engineering Section
Michigan Department of Community Health
BHS - Division of Health Facilities & Services
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