5.9.7 Diagnostic Areas

5.9.7.1 Laboratory space. If required by the functional program, a laboratory space, including counters, sinks, cabinets, label machines, computers, and hand-washing sinks, shall be provided to accommodate processing of blood draws and urine samples.

5.9.8 Construction Requirements

***5.9.8.1** Piping. Design consideration shall be given to the disposal of liquid waste from the dialyzing process to prevent odor and backflow.

***5.9.8.2** Temperature/humidity control

*5.10 Hyperbaric Suite

APPENDIX

A5.9.8.1 All installed reverse osmosis water and dialysis solution piping should be accessible.

A5.9.8.2 Due to the nature of the dialyzing process and the nature of the patient's illness, the temperature should be maintained at 72° to 78°F (22° to 26°C) with a relative humidity level of 30 to 60 percent.

A5.10 Hyperbaric Suite

Applicability

These guidelines should apply to hyperbaric facilities designated for clinical hyperbaric oxygen therapy, including hospital-affiliated and freestanding facilities.

General Facility Requirements

Hyperbaric chambers should be constructed in conformance with applicable construction codes (ASME PVHO-1, Safety Standard for Pressure Vessels for Human Occupancy) and carry a "U" stamp.

The facility should be constructed to comply with applicable local, state, and national construction codes governing the type of occupancy (health care, commercial, other) housing the hyperbaric chamber(s).

When a hyperbaric suite/clinic is provided, it should meet the requirements of Chapter 20, NFPA 99, and Chapter 12, NFPA 101.

Multiplace (NFPA Class "A" Chamber) Facilities

Emergency exit requirements

a. The facility housing a Class A chamber should be designed to allow rapid or emergency removal of patients and staff.

b. In the case of multiple Class A chambers installed in a single setting or a Class A chamber that contains multiple compartments, the rapid or emergency removal of a patient or personnel from one chamber/compartment should not restrict in any way the rapid and simultaneous removal of patients or personnel from all other chambers or compartments.

c. A minimum of two exits should be provided for the chamber room unless a single exit opens directly to a primary evacuation hallway.

Space requirements

The space required to house Class A chambers and supporting equipment should be defined by NFPA 99, Chapter 20 and the equipment manufacturer, but in any case should not be less than the following:

a. Minimum clearances around a (Class A) hyperbaric chamber should be as follows:

b. Chamber entry should be designed for gurney/stretcher access: 10 feet (3.04 meters).

c. Entries designed for wheeled gurneys should be provided with access ramps that are flush with the chamber entry doorway.

d. Chambers that utilize fixed internal stretcher frames and transfer gurneys should be designed to allow immediate removal of the patient upon chamber depressurization.

e. Chamber man lock entries or compartments utilizing circular entry hatchways: 4 feet (1.21 meters).

f. The chamber should have a minimum of 4 feet (1.21 meters) of clearance all the way around the chamber, except as specified with regard to entry areas.

g. If the chamber control console is immediately adjacent to the chamber, a minimum passageway of 4 feet (1.21 meters) should be provided between the control console and any obstruction.

Monoplace (Class B) Facilities

Emergency exit requirements

a. In the case of multiple Class B chambers installed in a single setting, the rapid or emergency removal of a patient from one chamber should not restrict in any way the rapid and simultaneous removal of patients from all other chambers.

b. A minimum of two exits should be provided for the chamber room unless a single exit opens directly to a primary evacuation hallway.

c. Exit doorways should have a minimum opening of 46 inches. (1.16 meters)

Fire call station in suite

APPENDIX

Space requirements

The space required to house Class B chambers and supporting equipment should be defined by the equipment manufacturer, but in any case should not be less than the following:

The space housing Class B chambers should conform to NFPA 99, Chapter 20 requirements.

Minimum clearances between individual (Class B) hyperbaric chambers should be as follows:

a. Chamber and side wall, 18 inches (45.72 centimeters). Exception: If any chamber controls, ventilation valves, or other operator-adjustable devices are located on or under the chamber adjacent to the side wall, minimum clearance should be 36 inches (91.44 centimeters).

b. Between control side of two chambers, 48 inches (1.21 meters).

c. Between back side of two chambers, 24 inches (60.96 centimeters)

d. A minimum passage of 14 inches (35.56 centimeters) should be provided at the foot end of each chamber. An oxygen shut-off valve should be provided for each chamber and should be unobstructed by the chamber and located as to be immediately accessible to the chamber operator.

e. A minimum space of 102 inches (2.59 meters) should be available at the head end of the chamber to allow for the safe insertion and removal of the patient from the chamber.

f. Any electrical service outlets located within 10 feet of the Class B chamber entrance should be sited no less than 3 feet (0.91 meter) above floor level.

Support Areas

The following support areas should be provided for the hyperbaric facility. If the hyperbaric facility is included as an integral portion of another service such as a wound care department, support areas may be shared:

Support areas for the hyperbaric suite

a. Reception/control desk

b. Patient waiting area. The waiting area should be large enough to accommodate the clinical program and chamber mix if also used as a holding area. The area should be out of traffic, under staff control, and should have seating capacity in accordance with the functional program. When the hyperbaric suite is routinely used for outpatients and inpatients at the same time, separate waiting areas should be provided with screening for visual privacy between the waiting areas. Patient waiting areas may be omitted for two or fewer Class B hyperbaric chamber units.

c. Holding area. The area should be out of traffic flow from the chamber and should not obstruct access to the exits. A holding area under staff control should accommodate inpatients on stretchers or beds. Stretcher patients should be out of the direct line of normal traffic. The patient holding area may be omitted for two or less individual hyperbaric chamber units.

d. Consultation/treatment rooms. Appropriate room for individual consultation and treatment with referring clinicians should be provided.

e. Patient record storage area. An area should be provided that is out of traffic flow and under staff control. This can be in the clinical area or located at the reception/control desk.

f. Hand-washing stations. A lavatory equipped for hand-washing with hands-free operable controls should be located in the room where the hyperbaric chambers are located.

g. Compressor room. This area should be large enough to house the chamber compressors, accumulator tanks, fire suppression system and their ability to meet the requirements of NFPA 99, Chapter 20. The reserve breathing gases could also be housed here if it is in close proximity to the chamber room.

h. Soiled holding area. A soiled holding room should be provided with waste receptacles and soiled linen receptacles.

i. Equipment and supply storage

Clean supply and linen storage. A clean storage space should be provided for clean supplies and linens. Hand-washing fixtures should be provided with hands-free operable controls. When a separate storage room is provided, it may be shared with another department.

Gas cylinder room. This room should be large enough to accommodate the storage of enough (H) cylinders and manifolds for the reserve breathing gases required for chamber operations. The minimum room size should be able to house eight (H) cylinders and two gas manifolds, consisting of at least two (H) cylinders on each manifold.

j. Housekeeping room. The housekeeping room should contain a floor receptor or service sink and storage space for housekeeping supplies and equipment, and should be located nearby.

Support areas for staff

Toilets with hand-washing fixtures with hands-free operable controls may be outside the suite but should be convenient for staff use.

Support areas for patients

pt call bell

a. Patient dressing rooms. Dressing rooms for outpatients should be provided and should include a seat or bench, mirror, and provisions for hanging patients' clothing and for securing valuables. At least one dressing room should be provided to accommodate wheelchair patients.

b. Patient toilet rooms. Toilet rooms should be provided with hand-washing fixtures with hands-free operable controls with direct access from the hyperbaric suite.