

TABLE 2
(OAR 333-535-0300)
VENTILATION REQUIREMENTS FOR HOSPITAL AREAS
AFFECTING PATIENT CARE 1/
(REFER TO NOTES AT END OF TABLE FOR ADDITIONAL INFORMATION)

AREA DESIGNATION	AIR MOVEMENT RELATIONSHIP TO ADJACENT AREA 2/	MINIMUM OUTSIDE AIR CHANGES PER HOUR 4/	MINIMUM TOTAL AIR CHANGES PER HOUR 4/, 18/	RECIRCULATED BY MEANS OF ROOM UNITS 5/	ALL AIR EXHAUSTED DIRECTLY OUTDOORS 6/, 3/	DESIGN TEMPERATURE DEGREES 8/
CRITICAL CARE AREAS						
Operating Room (General Surgery), Surgical Cystoscopy 14/	out	(4)	20	No	--	70/75
Operating Room (Outpatient/Dental) 14/	out	(3)	15	No	--	70/75
Trauma Room 9/	out	(3)	15	No	--	70/75
Delivery Room, C-Section 14/	out	(3)	15	No	--	70/75
Cardiac Cath., Invasive Special Procedures	out	(3)	15	No	--	70/75
Endoscopy Rooms	in	(2)	10	No	Yes	70/75
Nursery Suite (Normal Newborn)	out	2	6	No	--	75
Nursery (Special Care & NICU)	out	2	6	No	--	75
Post-Anesthesia Recovery Room (Stage 1) 14/	--	(2)	6	No	--	75
Critical and Intensive Care	--	2	6	No	--	70/75
Emergency waiting room 19/	in	(2)	6	No	Yes 19/	--
NURSING UNITS						
LDR, LDRP Room 15/	--	(2)	6	No	--	70/75
Patient Room	--	(2)	6	--	--	75
Patient Corridor	--	1	4	--	--	--
Airborne Infectious Isolation Room 10/	in	(2)	12	No	Yes	70/75
Protective Environment Room 10/	out	(2)	12	No	--	70/75
Isolation Alcove or Anteroom	out/in	--	12	No	Yes	--
Examination Room	--	(2)	6	--	--	75
Medication Room	out	(2)	4	--	--	--
Treatment, Pre-op, Holding Room	--	(2)	6	--	--	75
X-Ray, Scanner, CT, MRI, & Ultrasound	--	(2)	6	--	--	75

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EEG, EMG & EKG Rooms	--	(2)	6	--	--	75
Respiratory Inhalation Therapy	in	(2)	6	No	Yes	75
Minor Procedures 13/	out	(2)	6	--		75
Minor Procedure Recovery, Stage 2	--	(2)	6	No	--	75
Bronchoscopy (includes holding, treatment and recovery)	in	(2)	12	No	Yes	--
Radiation Therapy Treatment	--	(2)	6	--	--	75
Physical Therapy	in	(2)	6	--	--	75
Hydrotherapy	in	(2)	6	--	Optional	75

SUPPORT AND SERVICE AREAS

Soiled Utility, Soiled Workroom, Soiled Holding, Bio-Hazard	in	(2)	10	No	Yes	--
Clean Utility, Clean Workroom, Clean Holding 20/	out	(1)	4	No	--	--
Autopsy	in	(2)	12	No	Yes	--
Darkroom	in	(2)	10	--	Yes	--
Non-Refrigerated Body Holding Room 11/	in	optional	10	--	Yes	--
Toilet Room	in	optional	10	--	Yes	70
Bathing Room	in	optional	10	--	Yes	75
Janitor's Closet	in	optional	10	No	Yes	--
Sterilizer Room (Equipment), Endoscopic Instrument Cleaning 20/	in	(2)	10	--	Yes	--
ETO – Sterilizer, Cylinder Room 16/	in	optional	10	No	Yes	75
Linen & Trash Chute Rooms	in	optional	10	No	Yes	--
Hot Lab(Nuclear Medicine), Radiation Therapy 17/	in	(2)	6	No	Yes	--
Pharmacy	out	(2)	4	--	--	--
Laboratory General 7/	in	(2)	6	--	Yes	--
Hot Lab(Nuclear Medicine)17/	in	(2)	6	No	Yes	--
Pathology	in	(2)	6	No	Yes	--

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Cytology	in	(2)	6	No	Yes	--
Biochemistry	out	(2)	6	No	Yes	--
Histology	in	(2)	6	No	Yes	--
Bacteriology	in	(2)	6	No	Yes	--
Serology	out	(2)	6	No	Yes	--
Glass washing (Laboratory)	in	(2)	10	--	Yes	--
Food Preparation Center 12/		(2)	10	No	--	--
Warewashing (Food Preparation)	in	(2)	10	No	Yes	--
Dietary Dry Storage	in	Optional	2	--	--	--
Laundry, General	--	(2)	10	No	Yes	--
Soiled Linen (sorting & storage)	in	optional	10	No	Yes	--
Clean Linen	out	optional	2	--	--	--
Medical Gas Storage (See NFPA 99 and Fire Code Requirements) 14/	--	optional	8	--	Yes	--
Soiled Room, Decontamination Room	in	(2)	6	No	Yes	--
Clean Workroom & Sterile Storage 20/	out	(2)	4	No	--	75
Pantry Nourishment		optional	2	--	--	--

NOTES APPLICABLE TO TABLE 2:

“VENTILATION REQUIREMENTS FOR HOSPITAL AREAS AFFECTING PATIENT CARE”

- 1/ This table covers ventilation standards for comfort, as well as for asepsis and odor control, in areas of hospitals that directly affect patient care. Areas where specific standards are not given shall be ventilated in accordance with ASHRAE Standard 62, “Ventilation for Acceptable Indoor Air Quality Including Requirements for Outside Air.” Specialized patient care areas including organ transplant units, burn units, etc., shall have additional ventilation provisions for air quality control as may be appropriate. OSHA standards and/or NIOSH criteria include special ventilation requirements for employee health safety within health care facilities. The agency responsible in Oregon for enforcement is the Workers’ Compensation Department.
- 2/ Design of the ventilation system shall provide that air movement is from “clean to less clean” areas. Those areas which do require positive and continuous control are noted with “out” or “in” to indicate the required direction of air movement in relation to the space named. Rate of air movement may, of course, be varied as needed within the limits required for positive control. Air movement for rooms with dashes and non-patient areas may vary as necessary to satisfy the system used.
- 3/ To satisfy exhaust needs, additional replacement air from outside may also be necessary.
- 4/ Number of total air changes may be reduced when the room is unoccupied if provisions are made to

ensure that the number of air changes indicated is automatically re-established any time the space is being utilized. The number of exhaust air changes required for contaminated areas shall not be reduced. Where the number of outside air changes per hour is enclosed in parentheses, outside air qualities may be reduced when the room is unoccupied, if provisions are made to ensure that outside air rates are automatically re-established any time the space is being utilized. Adjustments shall include provisions so that the direction of air movement shall remain the same when the number of air changes is reduced.

- 5/ Because of cleaning difficulty and potential for buildup of contamination, recirculating room units shall not be used in areas marked with “no”.
- 6/ Air from areas with contamination and/or odor problems shall be exhausted to the outside and not recirculated to other areas. Note that individual circumstances may require special considerations for air exhaust to outside, e.g., an intensive care unit where patients with pulmonary infection might be expected and rooms for burn patients.
- 7/ The overall laboratory area shall be maintained at a negative pressure with respect to the surrounding areas at all times.
- 8/ Dual temperature indications (such as 70/75) are for an upper and lower variable range within which the room temperature must normally be controlled. A single figure indicates required minimum heating or cooling design capacity. Nothing in this rule shall be construed as precluding the use of the temperatures higher or lower than those noted when the patients’ comfort and medical conditions make differing temperatures desirable. Occupied areas not normally utilized by inpatients may have design temperatures of 68 degrees Fahrenheit for heating and 78 degrees Fahrenheit for cooling. Unoccupied areas such as storage, etc., shall have temperatures appropriate for the function intended.
- 9/ The term “trauma room” as used here is the operating room space in the trauma center that is routinely used for emergency surgery. The first aide room and/or “emergency room” used for general initial treatment of accident victims may be ventilated as noted for the “treatment room.”
- 10/ Airborne infectious isolation is a room with an inward air movement relationship to adjacent areas where a patient with airborne infectious diseases may be a risk to the surrounding area. Protective environment is a room with an outward air movement relationship to adjacent areas where the patient may be at risk from the surrounding areas. Rooms with reversible airflow provisions for the purpose of switching between airborne infectious and protective environment isolation rooms are not acceptable.
- 11/ The non-refrigerated body holding room would be applicable only for those facilities that do not perform autopsies on site and utilize the space for short periods while waiting for body transfer to be complete. Design temperature given is for cooling.
- 12/ Food preparation centers shall have ventilation systems that have an excess of air supply for “out” air movement when hoods are not in operation.
- 13/ Minor Procedure Rooms are rooms where non-invasive and non-anesthetizing procedures are performed.
- 14/ NIOSH criteria documents regarding occupational exposure to waste anesthetic gases and vapors, and control of occupational exposure to nitrous dioxide in the dental operator indicate a need for both local exhaust (scavenging) systems and general ventilation of the areas in which respective gases are utilized.
- 15/ Ventilation levels indicated for LDR/LDRP rooms are for rooms in which no or only occasional small amounts of anesthesia gases are delivered and when restrictions for use are included in the hospital’s written anesthesia policy.
- 16/ Specific regulations exist regarding ethylene oxide (ETO) use under rules of the state Workers’ Compensation Department, OAR Chapter 437, Division 156. These rules include specific requirements for local exhaust of the ETO sterilizer. Also, see OAR 333-074-0355(4)(a)(R) for further requirements.
- 17/ There are special requirements imposed by the U.S. Nuclear Regulatory Commission (Regulatory Guide 10.8-1980) regarding use of Xenon 133. These standards are not, however, adopted as a rule by the State of Oregon.
- 18/ Air change requirements indicated are minimum values. Higher values should be used when required

to maintain indicated room conditions (temperature and humidity), based on the cooling load of the space (lights, equipment, people, exterior walls and windows, etc.)

- 19/ A ventilation system serving Emergency Waiting Rooms may recirculate air if HEPA filters are used. In this application, the return air shall be passed through the HEPA filters before it is introduced into any other spaces.
- 20/ When sterilizers requiring exhaust are located within a clean utility, workroom or sterile storage room, local exhaust shall be provided while maintaining the outward air movement relationship to adjacent areas.