

- (2) Spaces of nursing homes and limited care facilities wired in accordance with Chapters 1 through 4 of this *Code* where these spaces are used exclusively as patient sleeping rooms, as determined by the health care facility's governing body

Informational Note No. 1: See 406.12(5) for receptacles located in health care facility business offices, corridors, and waiting rooms that are required to be tamper resistant.

Informational Note No. 2: See 210.12(D) for branch circuits supplying outlets and receptacles located in patient sleeping rooms in nursing homes and limited care facilities that are connected to arc-fault circuit-interrupter circuits.

- (3) Areas used exclusively for any of the following purposes:
- a. Intramuscular injections (immunizations)
  - b. Psychiatry and psychotherapy
  - c. Alternative medicine
  - d. Optometry
  - e. Pharmacy services not contiguous to health care facilities

Informational Note No. 3: See NFPA 101-2021, *Life Safety Code*.

Areas in nursing homes that are designated as patient sleeping rooms are not considered to be patient care spaces, even if residents require assistance to attend to their personal needs and safety. However, areas of nursing homes, including patient bedrooms, in which residents are intended to be examined or treated can be considered examining rooms and thus be classified in the broader category as general care space.

Article 517 is about mitigating electrical hazards in health care settings. As today's health care environment shifts from the traditional medical office or hospital settings to outpatient clinics and business occupancies where a person can receive certain minor levels of treatment or preventative procedures, it is necessary for the *NEC* to address this new direction to provide the necessary level of electrical safety for patients. The specific areas in 517.10(B)(3) are locations where patients are not being treated or examined in a manner that exposes them to an electrical hazard. For example, flu shots or other tests or immunizations given at a retail pharmacy do not result in the pharmacy being classed as a health care facility. Likewise, alternative health care practices such as acupuncture or homeopathy do not present an electrical hazard to patients. Optometry does not involve invasive procedures using electromedical equipment and is also excluded from the special wiring requirements in Part II of Article 517.

#### See also

**Article 100** for the definition of the term *patient care space category*

**517.12 Wiring Methods.** Except as modified in this article, wiring methods shall comply with Chapters 1 through 4 of this *Code*.

**517.13 Equipment Grounding Conductor for Receptacles and Fixed Electrical Equipment in Patient Care Spaces.** Wiring serving patient care spaces shall comply with the requirements of 517.13(A) and (B).

*Exception: Luminaires more than 2.3 m (7½ ft) above the floor and switches located outside of the patient care vicinity shall be permitted to be connected to an equipment grounding return path complying with the requirements of 517.13(A) or (B).*

Luminaires mounted 7½ feet above the floor and switches located outside the patient care vicinity are not required to have a separate insulated equipment grounding conductor (EGC); it is unlikely that a patient would contact these items or that an attendant would contact one of these items and a patient at the same time. The patient care vicinity consists of an area 6 feet horizontally in all directions from the bed and vertically to 7½ feet above the floor.

**(A) Wiring Methods.** All branch circuits serving patient care spaces shall be provided with an effective ground-fault current path by installation in a metal raceway system or a cable having a metallic armor or sheath assembly. The metal raceway system, metallic cable armor, or sheath assembly shall itself qualify as an equipment grounding conductor in accordance with 250.118.

These requirements apply to the branch circuits in spaces used for patient care and are not limited to patient rooms. Examining rooms, therapy areas, recreational areas, solariums, and certain patient corridors are also covered by these requirements. The branch-circuit wiring method used in these areas is one component of a two-part ground-fault current return path arrangement that is unique to patient care spaces. The metal raceway, metal cable armor, or metal cable sheath must qualify as an EGC in accordance with 250.118, independent of the second component of this equipment grounding method covered by 517.13(B).

Metal-sheathed cable assemblies are not permitted as a general wiring method for life safety and critical branch circuits, because 517.31(C)(3) requires such wiring to be protected by installation in metal raceways. However, listed flexible raceway and metal-sheathed cable assemblies are allowed for limited applications as described in 517.31(C)(3)(a) through f.

#### See also

**517.31(C)(3)** for additional requirements covering the mechanical protection of essential electrical system conductors

**(B) Insulated Equipment Grounding Conductors and Insulated Equipment Bonding Jumpers.**

- Δ **(1) General.** An insulated copper equipment grounding conductor that is clearly identified along its entire length by green insulation and installed with the branch circuit conductors within the wiring method in accordance with 517.13(A) shall be connected to the following:

- (1) Grounding terminals of all receptacles other than isolated ground receptacles
- (2) Metal outlet boxes, metal device boxes, or metal enclosures
- (3) Non-current-carrying conductive surfaces of fixed electrical equipment likely to become energized that are subject to personal contact, operating at over 100 volts