Subpart A—General Provisions

§ 870.1 Scope.

(a) This part sets forth the classification of cardiovascular devices intended for human use that are in commercial distribution.

Food and Drug Administration, HHS

870.2910 Radiofrequency physiological signal transmitter and receiver.
870.2920 Telephone electrocardiograph transmitter and receiver.

Subpart D—Cardiovascular Prosthetic Devices

870.3250 Vascular clip.
870.3260 Vena cava clip.
870.3300 Arterial embolization device.
870.3375 Cardiovascular intravascular filter.
870.3450 Vascular graft prosthesis.
870.3470 Intracardiac patch or pledget made of polypropylene, polyethylene terephthalate, or polytetrafluoroethylene.
870.3535 Intra-aortic balloon and control system.
870.3545 Ventricular bypass (assist) device.
870.3600 External pacemaker pulse generator.
870.3610 Implantable pacemaker pulse generator.
870.3620 Pacemaker lead adaptor.
870.3630 Pacemaker generator function analyzer.
870.3640 Indirect pacemaker generator function analyzer.
870.3650 Pacemaker polymeric mesh bag.
870.3670 Pacemaker charger.
870.3700 Pacemaker permanent or temporary pacemaker electrode.
870.3800 Cardiovascular implantable pacemaker.
870.3925 Replacement heart valve.
870.3935 Prosthetic heart valve holder.
870.3945 Prosthetic heart valve sizer.

Subpart E—Cardiovascular Surgical Devices

870.4075 Endomyocardial biopsy device.
870.4200 Cardiopulmonary bypass accessory equipment.
870.4205 Cardiopulmonary bypass bubble detector.
870.4210 Cardiopulmonary bypass vascular catheter, cannula, or tubing.
870.4220 Cardiopulmonary bypass heart-lung machine console.
870.4230 Cardiopulmonary bypass defoamer.
870.4240 Cardiopulmonary bypass heat exchanger.
870.4250 Cardiopulmonary bypass temperature controller.
870.4260 Cardiopulmonary bypass arterial line blood filter.
870.4270 Cardiopulmonary bypass cardiotomy suction line blood filter.
870.4320 Cardiopulmonary bypass pulsatile flow generator.
870.4330 Cardiopulmonary bypass on-line blood gas monitor.
870.4340 Cardiopulmonary bypass level sensing monitor and/or control.
870.4350 Cardiopulmonary bypass oxygenator.
870.4360 Nonroller-type cardiopulmonary bypass blood pump.
870.4370 Roller-type cardiopulmonary bypass blood pump.
870.4380 Cardiopulmonary bypass pump speed control.
870.4390 Cardiopulmonary bypass pump tubing.
870.4400 Cardiopulmonary bypass blood reservoir.
870.4410 Cardiopulmonary bypass in-line blood gas sensor.
870.4420 Cardiopulmonary bypass cardiotomy return sucker.
870.4430 Cardiopulmonary bypass intracardiac suction control.
870.4440 Vascular clamp.
870.4450 Surgical vessel dilator.
870.4500 Cardiovascular surgical instruments.
870.4575 Intraluminal artery stripper.
870.4885 External vein stripper.

Subpart F—Cardiovascular Therapeutic Devices

870.5050 Patient care suction apparatus.
870.5150 Embolectomy catheter.
870.5175 Septostomy catheter.
870.5200 External cardiac compressor.
870.5225 External counter-pulsating device.
870.5300 DC-defibrillator (including paddles).
870.5325 Defibrillator tester.
870.5550 External transcutaneous cardiac pacemaker (noninvasive).
870.5800 Compressible limb sleeve.
870.5900 Thermal regulating system.
870.5925 Automatic rotating tourniquet.


Source: 45 FR 7907-7971, Feb. 5, 1980, unless otherwise noted.
§ 870.3 Effective dates of requirement for premarket approval.

A device included in this part that is classified into class III (premarket approval) shall not be commercially distributed after the date shown in the regulation classifying the device unless the manufacturer has an approval under section 515 of the act (unless an exemption has been granted under section 520(g)(2) of the act). An approval under section 515 of the act consists of FDA’s issuance of an order approving an application for premarket approval (PMA) for the device or declaring completed a product development protocol (PDP) for the device.

(a) Before FDA requires that a device commercially distributed before the enactment date of the amendments, or a device that has been found substantially equivalent to such a device, has an approval under section 515 of the act, FDA must promulgate a regulation under section 515(b) of the act requiring such approval, except as provided in paragraph (b) of this section. Such a regulation under section 515(b) of the act shall not be effective during the grace period ending on the 90th day after its promulgation or on the last day of the 30th full calendar month after the regulation that classifies the device into class III is effective, whichever is later. See section 501(f)(2)(B) of the act. Accordingly, unless an effective date of the requirement for premarket approval is shown in the regulation for a device classified into class III in this part, the device may be commercially distributed without FDA’s issuance of an order approving a PMA or declaring completed a PDP for the device. If FDA promulgates a regulation under section 515(b) of the act requiring premarket approval for a device, section 501(f)(1)(A) of the act applies to the device.

(b) Any new, not substantially equivalent, device introduced into commercial distribution on or after May 28, 1976, including a device formerly marketed that has been substantially altered, is classified by statute (section 513(f) of the act) into class III without any grace period and FDA must have issued an order approving a PMA or declaring completed a PDP for the device before the device is commercially distributed unless it is reclassified. If FDA knows that a device being commercially distributed may be a “new” device as defined in this section because of any new intended use or other reasons, FDA may codify the statutory classification of the device into class III for such new use. Accordingly, the regulation for such a class III device states that as of the enactment date of the amendments, May 28, 1976, the device must have an approval under section 515 of the act before commercial distribution.

[52 FR 17735, May 11, 1987]

§ 870.9 Limitations of exemptions from section 510(k) of the Federal Food, Drug, and Cosmetic Act (the act).

The exemption from the requirement of premarket notification (section 510(k) of the act) for a generic type of class I or II device is only to the extent that the device has existing or reasonably foreseeable characteristics of commercially distributed devices within that generic type or, in the case of in vitro diagnostic devices, only to the extent that misdiagnosis as a result of using the device would not be associated with high morbidity or mortality. Accordingly, manufacturers of any commercially distributed class I or II device for which FDA has granted an exemption from the requirement of
premarket notification must still submit a premarket notification to FDA before introducing or delivering for introduction into interstate commerce for commercial distribution the device when:

(a) The device is intended for a use different from the intended use of a legally marketed device in that generic type of device; e.g., the device is intended for a different medical purpose, or the device is intended for lay use where the former intended use was by health care professionals only;

(b) The modified device operates using a different fundamental scientific technology than a legally marketed device in that generic type of device; e.g., a surgical instrument cuts tissue with a laser beam rather than with a sharpened metal blade, or an in vitro diagnostic device detects or identifies infectious agents by using deoxyribonucleic acid (DNA) probe or nucleic acid hybridization technology rather than culture or immunoassay technology; or

(c) The device is an in vitro device that is intended:

(1) For use in the diagnosis, monitoring, or screening of neoplastic diseases with the exception of immunohistochemical devices;

(2) For use in screening or diagnosis of familial or acquired genetic disorders, including inborn errors of metabolism;

(3) For measuring an analyte that serves as a surrogate marker for screening, diagnosis, or monitoring life-threatening diseases such as acquired immune deficiency syndrome (AIDS), chronic or active hepatitis, tuberculosis, or myocardial infarction or to monitor therapy;

(4) For assessing the risk of cardiovascular diseases;

(5) For use in diabetes management;

(6) For identifying or inferring the identity of a microorganism directly from clinical material;

(7) For detection of antibodies to microorganisms other than immunoglobulin G (IgG) or IgG assays when the results are not qualitative, or are used to determine immunity, or the assay is intended for use in matrices other than serum or plasma;

(8) For noninvasive testing as defined in §812.3(k) of this chapter; and

(9) For near patient testing (point of care).

[65 FR 2314, Jan. 14, 2000]

Subpart B—Cardiovascular Diagnostic Devices

§870.1025 Arrhythmia detector and alarm.

(a) Identification. An arrhythmia detector and alarm is a system that monitors the electrocardiogram and is designed to produce a visible or audible signal or alarm when an atrial or ventricular arrhythmia, such as a premature contraction or ventricular fibrillation, exists.

(b) Classification. Class III (premarket approval).

(c) Date PMA or notice of completion of a PDP is required. No effective date has been established of the requirement for premarket approval. See §870.3.


§870.1100 Blood pressure alarm.

(a) Identification. A blood pressure alarm is a device that accepts the signal from a blood pressure transducer amplifier, processes the signal, and emits an alarm when the blood pressure falls outside a pre-set upper or lower limit.

(b) Classification. Class II (performance standards).

§870.1110 Blood pressure computer.

(a) Identification. A blood pressure computer is a device that accepts the electrical signal from a blood pressure transducer amplifier and indicates the systolic, diastolic, or mean pressure based on the input signal.

(b) Classification. Class II (performance standards).

§870.1120 Blood pressure cuff.

(a) Identification. A blood pressure cuff is a device that has an inflatable bladder in an inelastic sleeve (cuff) with a mechanism for inflating and deflating the bladder. The cuff is used in conjunction with another device to determine a subject’s blood pressure.