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| Sommario/riassunto | Performance and design criteria are provided in this standard for monitors that are worn on the trunk of the body to measure the personal dose equivalent, or the dose equivalent rate from external sources, of ionizing radiation. This is a revision of ANSI N42.20-1995 Scope: This standard applies to the following types of active electronic devices that are worn on the trunk of the body for the purpose of measuring the personal dose equivalent, or the dose equivalent rate, from external sources of radiation. The types of dosimeters include those designed for measuring Type 1-X, gamma, and high-energy beta radiation Type 2-Neutron radiation Type 3-X, gamma, high-energy beta, and neutron radiation (i.e., total dose). The standard specifies the design and performance criteria for the personal electronic dose monitors and, if supplied, the associated readout system. It applies to devices used for the measurement of the personal dose equivalent (rate) from photon radiations (x-rays and gamma-rays) of energies 50 keV to 1.5 MeV, beta radiation of maximum energies greater than 2.0 MeV, neutron radiation from thermal energies to approximately 15 MeV. Purpose: The purpose of this standard is to specify performance and design criteria for personal electronic monitors used for the determination of the personal dose equivalent, or the dose equivalent |

rate, from external sources of radiation. It is necessary to standardize the performance and design of devices used for this important purpose so that inappropriate instruments are not used to evaluate the personal dose equivalent or the dose equivalent rate. Recent developments in this area of instrumentation have necessitated the development of a standard for these devices. This standard should be used in conjunction with ANSI N42.17A-1989.