

Radiation Safety and Protection

527.1 PURPOSE AND SCOPE

To ensure proper safety precautions are followed when operating body scan devices.

527.2 DEFINITIONS

Body Scan: X-ray technology used to produce an image revealing the presence of contraband concealed on or inside of a subject.

Body Scanner: A stationary system for obtaining full height radiographic images of a person to detect any types of weapons, explosives, drugs, and other contraband either concealed under clothing, swallowed, or hidden in anatomical cavities of the human body without causing harm to the person being scanned.

X-ray (X-radiation): A form of electromagnetic radiation similar to light but of shorter wavelength and capable of penetrating solids and of ionizing gases.

Radiation: Process in which energetic particles or waves travel through a medium or space. X-radiation is an ionizing radiation.

Radiation Survey: Measurement of the X-radiation equivalent dose rate at the external surfaces of the body scanner, the personal workstation(s), the boundaries of the working zone, and in adjacent rooms if applicable.

Exposure: A term defining the amount of ionizing radiation that strikes living or inanimate material.

Dose: The quantity of radiation or energy absorbed.

527.3 POLICY

It is the policy of the San Diego County Probation Department to safeguard the health of Probation Department employees, volunteers, visitors, and youth in the vicinity of a body scan device and to ensure compliance with all applicable Federal and State regulations. In addition, Institutions will ensure that radiation safety procedures and guidelines are followed to ensure the safe operation of the unit(s).

527.4 REFERENCES

For further guidance see Radiation Safety and Protection Procedure

Title 10 (10 CFR Part 20) – Code of Federal Regulations, Standards for Protection Against Radiation; Title 21 (CFR 1020.40) – Code of Federal Regulations, Chapter 1, Subchapter J (Radiological Health); Title 17 (17 CCR)- California Code of Regulations, Public Health Chapter 5, Subchapters 4 and 4.5; Body Scanner Operator/Maintenance Manual