

NOTICE TO EMPLOYEES

STANDARDS FOR PROTECTION AGAINST RADIATION

CALIFORNIA RADIATION CONTROL REGULATIONS (CALIFORNIA CODE OF REGULATIONS, TITLE 17, SECTION 30255)

The California Radiation Control Regulations include standards for protection against radiation hazards. The California Department of Public Health has primary responsibility for administering these standards which apply to both employers and employees. Enforcement is carried out by the California Department of Public Health or its authorized inspection agencies.

EMPLOYEES' RESPONSIBILITIES

You should know and understand those California radiation protection standards and your employer's operating and emergency procedures which apply to your work. You should comply with these requirements for your own safety and the safety of others. Report promptly to your employer any condition which may lead to or cause a violation of these standards or employer's operating and emergency procedures.

SCOPE OF THE STANDARDS

The Standards for Protection Against Radiation define:

1. Limits on exposure to radiation and radioactive materials;
2. Actions to be taken after accidental exposure;
3. Working conditions requiring personnel monitoring, safety surveys, engineered controls, and safety equipment;
4. Proper use of caution signs, labels, and safety interlock devices;
5. Requirements for keeping worker exposure records and reporting of such exposures;
6. The requirement for specific operating and emergency procedures for radiation work; and
7. The rights of workers regarding safety inspections.

EMPLOYERS' RESPONSIBILITIES

Your employer is required to:

1. Comply with the requirements of the California Radiation Control Regulations, departmental orders, and license conditions;
2. Post or make available to you copies of the Radiation Control Regulations, any license issued thereunder, and your operating and emergency procedures;
3. Post any notice of violation of radiological working conditions; and
4. Provide you with information on your exposure to radiation.

REPORTS ON YOUR RADIATION EXPOSURE HISTORY

1. California Radiation Control Regulations require your employer to give you a written report if you receive an exposure greater than the limits set in the radiation safety standards. Basic limits for occupational radiation exposure can be found in section 30253 referencing title 10, Code of Federal Regulations, part 20 (10 CFR 20). Limits on exposure to radiation and exposure to concentrations of radioactive material in air are specified in 10 CFR 20, subpart C.
2. If the radiation protection standard, under 10 CFR 20 (subpart F) requires that your radiation exposure be monitored, your employer must, upon your request, give you a written report of your exposures upon termination of your employment, and make available to you the information in your dose records (as maintained under the provisions of 10 CFR 20.2106).
3. Your employer is required to provide you with an annual report of the dose you received in that monitoring year if the dose exceeds 100 millirem, or if you request an annual report.

INSPECTIONS

The Department or one of its contractors will inspect your workplace from time to time to ensure that health and safety requirements are being followed and that these requirements are effective in protecting you. Inspectors may confer privately with you at the time of inspection. At that time you may direct the inspector's attention to any condition you believe is or was a violation of the safety requirements.

In addition, if you believe at any time that any health and safety requirements are being violated, you or your workers' representative may request that an inspection be made by sending a complaint to the Department of Public Health or other official agency. Your complaint must describe the specific circumstances of the apparent violation and must be signed by you or your workers' representative. The Department is required to give your employer a copy of any such complaint. Names may be withheld at your request. You should understand, however, that the law protects you from being discharged or discriminated against in any way for filing a complaint or otherwise exercising your rights under the California Radiation Control Regulations.

POSTING REQUIREMENTS

Copies of this notice must be posted in a sufficient number of places in every establishment where employees are employed in activities regulated by the California Radiation Control Regulations, to permit employees working in or frequenting any portion of a restricted area to observe a copy on the way to or from their place of employment.

FOR RADIOLOGICAL EMERGENCY ASSISTANCE (24/7), PHONE 1-800-852-7550

**To contact the Radiologic Health Branch, phone (916) 327-5106
or go to the [Radiologic Health Branch](https://www.cdph.ca.gov/rhb) (<https://www.cdph.ca.gov/rhb>)**

Guideline for Operating Procedures for Radiation Sources

California Code of Regulations (CCR), Title 17, section 30255(b)(2) requires that the owner/registrant shall conspicuously post a copy of operating procedures and emergency procedures applicable to work with their radiation sources. If posting of the document is not practicable a notice that describes where the document may be located can be posted. In addition, the owner/registrant is responsible for radiation safety and for assuring that only authorized persons operate the x-ray machine(s) under his/her jurisdiction.

Some of the basic components of operator safety include:

1. No x-ray worker shall be used to hold patients except in an emergency and no person shall be regularly used to hold such patients. [CCR, section 30308(b) 1)]
2. The operator must make use of the appropriate protection devices, e.g., lead aprons, shields, etc. [CCR, section 30307(b)(1)]
3. Careful collimation shall be used to restrict the x-ray beam to the area of clinical interest. [CCR, section 30308(b)(3)]
4. Gonadal shielding of not less than 0.5 mm lead equivalent shall be used for patient procedures in which the gonads are in the direct beam, except for cases in which this would interfere with the diagnostic procedure [CCR, section 30308(b)(4)]
5. Personnel monitoring devices (dosimeters) must be worn when they are provided or required (Title 10, Code of Federal Regulations, section 20.1502). Monitoring devices are to be worn at or near the collar level on the outside of a lead apron.
6. The operator is responsible for clearing the x-ray room of nonessential person prior to generating x-rays [CCR, section 30308(b)(2)]
7. Protective aprons shall be worn in the fluoroscopy room by all persons likely to be exposed to 5mR/hr or more [CCR, section 30307(b)1)
8. The operator of mobile x-ray equipment shall stand at least six feet from the patient and well away from the useful x-ray beam. Personnel monitoring is required for all operators of mobile x-ray equipment [CCR, section 30309(a)(2) and (b)(3)]

While the above items are common to most x-ray facilities, other related items pertinent to your individual facility must be included to complete your operating procedures.

Suggested References

- a) California Code of Regulations, Title 17
- b) Title 10, Code of Federal Regulations Part 20
- c) National Council on Radiation Protection (NCRP) Reports No. 33 and 48

Available from: NCRP Publications
7910 Woodmont Avenue, Suite 800
Bethesda, MD 20814-3095



KAREN L. SMITH, MD, MPH
Director and State Public Health Officer

State of California—Health and Human Services Agency
California Department of Public Health



EDMUND G. BROWN JR.
Governor

January 26, 2016

**AMENDED EXEMPTION TO CALIFORNIA CODE OF REGULATIONS (CCR)
Title 17 (17CCR), Sections 30311(b)(4), 30314(a)(5) and 30314(b)(1)**

The California Department of Public Health, Radiologic Health Branch (Department), is issuing this exemption to address the use of Portable Hand-Held X-Ray Systems used in dental and veterinary settings. This exemption supersedes Radiation Safety Advisory 06-01, issued February 24, 2006, and the exemptions issued on August 17, 2010, and March 13, 2013. Pursuant to Title 17, California Code of Regulations, §30104, the Department may grant exemptions from the applicable requirements of Title 17 as it determines are authorized by law and will not result in any undue hazard to health, life, or property.

California dentists and the trained staff operating under the supervision of a dentist are hereby granted an exemption from the prohibition listed in 17 CCR 30311(b)(4), which states “Neither the tube housing nor the position indicating device (cone cylinder) shall be hand-held during exposure.” Veterinarians and the trained staff operating under the supervision of a veterinarian are hereby granted an exemption from the prohibitions listed in 17 CCR 30314(a)(5), which states “A dead-man type of exposure switch shall be provided, together with an electrical cord of sufficient length so that the operator can stand out of the useful beam and at least 6 feet from the animal during all X-ray exposures” and in 17 CCR 30314(b)(1), which states, in part, “The tube housing shall not be held by the operator.” These individuals (dentists, veterinarians, and their trained staff) may operate portable hand-held x-ray systems while this exemption remains in effect.

Compliance with the provisions listed below will be evaluated during inspections conducted by Departmental personnel. This exemption remains in effect provided the following conditions are met:

1. The portable dental X-ray system being used has received FDA approval and is being used in a manner consistent with that approval;
2. A backscatter shield provided by the manufacturer, which provides not less than 0.25 mm lead equivalent, must be permanently affixed in place at all times; the X-ray system may not be used if this component becomes broken or dislodged;



3. Personnel monitoring devices must be worn by all individuals operating portable dental X-ray systems. The personnel monitoring must be evaluated on a monthly basis, and records must be available for review by the Department;
4. All personnel must receive training in the safe use of these X-ray systems; records of training must be available for review by the Department.

Further exemption is made for users of the Aribex Nomad, Aribex Nomad Pro, Nomad Pro2, Aribex Nomad eXaminer, and Nomad 75kV, based on ten years of exposure data from the same or substantially similar Aribex Nomad devices. Users of these portable hand-held X-ray systems are not required to comply with the personnel monitoring requirements found in condition 3. The personnel monitoring requirements may be reevaluated for other units after sufficient historical exposure data has been obtained and submitted, by the manufacturer, to the Department for review.

As with other radiation-producing devices subject to regulation, users must adhere to the Standards for Protection Against Radiation, as specified in 17 CCR 30253. This exemption is subject to review and may be revoked if the registrant does not adhere to the conditions of the exemption. This exemption is valid until rescinded, or until amendments are made to 17 CCR 30311(b)(4), 30314(a)(5), and/or 30314(b)(1).

For the Department of Public Health:

signature on file
Gonzalo L. Perez, Chief
Radiologic Health Branch