



### **F50 Current Radiation Safety Regulatory Policies and the Utilization Status in the United States of the Nomad™ Portable Hand-Held Dental Radiation Emitting Device**

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After attending this presentation, attendees will understand and appreciate that despite the successful implementation of the Nomad™ hand-held dental radiation emitting device in the aftermath of recent international and national forensic multiple fatality incident (MFI) events, virtually every state radiation safety regulatory agency in the United States has continued to adhere to its previously established radiation safety regulations, which prohibits the general use of the hand-held radiation emitting device in dental settings and in other fields of practice (veterinary medicine, physical anthropology, surgery).

This presentation will impact the forensic science community by serving as a reference for those dental practitioners and other experts who may be requested to provide supportive testimony before state radiation safety regulatory agencies when advocating the common use of these hand-held radiation emitting devices. Additionally, this state-by-state radiation safety policy review study can facilitate the task of state radiation safety officials, responsible for reevaluating current restrictive principles associated with these units, as they deliberate and reassess jurisdictional policies which can lead to eventual approval status for the Nomad™ portable hand-held dental radiation emitting device for general use in their respective states.

Although recent studies have shown the Nomad™ unit to be extremely safe for the operator, patient, and bystander, state radiation safety regulatory agencies have often been reluctant to approve of the application of the Nomad™ device for general use as indicated above. Thus, these agencies have continued to maintain rigid regulations governing the general use of this device. Principally, the caution expressed by these regulatory agencies continues to be based on the extremely poor scatter control and poor shielding characteristics of earlier hand-held radiation emitting devices. As reported, the Nomad™ unit has overcome the limitations of its predecessors.

It is the purpose of this study to review, compare, summarize, and report the current state-by-state radiation safety regulatory policies in the United States regarding the approval status of the Nomad™ device for general use. With this information, forensic odontologists, general dental practitioners, and those in other disciplines, seeking to employ the Nomad™ device, will have knowledge of the regulatory stipulations required in their respective jurisdictions.

**Forensic Science, Portable Radiation Emitting Device, Radiation Safety Regulatory Policies**