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A Radiation Homeland Security Workshop Presented to the City of Berkeley Fire Department

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A radiation incident in a community, ranging from a transportation accident to a dirty bomb, is expected to be rare, but still can occur. First responders to such an incident must be prepared. City of Berkeley officials met with members of the Lawrence Berkeley National Laboratory staff and agreed that the laboratory participants would create material and teach it to all of their fire fighting staff. To design such a course, nuclear physicists, biologists and health physicists merged some of their existing teaching material together with previous homeland security efforts to produce a course that lasted one full day. The material was designed to help alleviate the myths and fear of radiation experienced by many first responders. It included basic nuclear physics information, biological effects, and methods that health physicists use to detect and handle radiation. The curriculum included several hands on activities which involved working directly with the meters the Berkeley Fire Department possessed. In addition, I will discuss some observations from teaching this course material plus some unusual problems that we encountered, such as suddenly the whole class responding to a fire.