

Abstract Submitted
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A half-century ago physicists missed a major public service opportunity, costing the human race widespread chronic illness and many deaths! MARJORIE LUNDQUIST, Bioelectromagnetic Hygiene Institute — Radar—pulsed microwave (MW) radiation—helped the Allies win World War II but health concerns soon arose. Alerted to a syndrome resembling *mild radiation poisoning*,¹ a worried M.D. surveyed radar-exposed workers, finding a high incidence of internal bleeding, 2 leukemia cases in 600 radar operators, 2 brain tumor cases in a 5-man MW research team and many complaints of headache. He sent his report² to the Pentagon in 1953. Alarmed Navy officers convened a meeting³ [mostly of electrical engineers (EEs)] to identify a safe level of MW exposure for servicemen. Biophysicist Herman Schwan attended, playing a major role in establishing 10 mW/cm² as a *thermally safe* MW exposure limit. The IEEE became sole sponsor of ANSI C95 [an early health standard for radiofrequency (RF) exposure] with *negative long-term consequences for human health!* I review RF health standards development since 1953, comparing what physicists might have done, had *they*—not EEs—had this responsibility! [See also my technical abstract.]¹ N.H. Steneck, **The Microwave Debate**, Cambridge, MA: MIT Press, 1984; p. 33. ² J.T. McLaughlin, **A Study of Possible Health Hazards from Exposure to Microwave Radiation** (Hughes Aircraft, Culver City CA, Feb. 9, 1953). ³ **Biological Effects of Microwaves**, meeting minutes (Navy Dept. Conference, Naval Medical Research Institute, Bethesda MD, Apr. 29, 1953).

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