



U.S. Nuclear Regulatory Commission Briefing

Radiation Protection Standards

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A Partnership Dedicated to Radiation Protection



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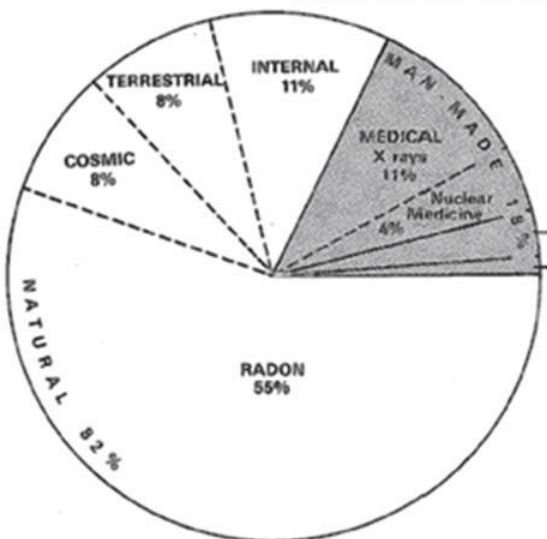
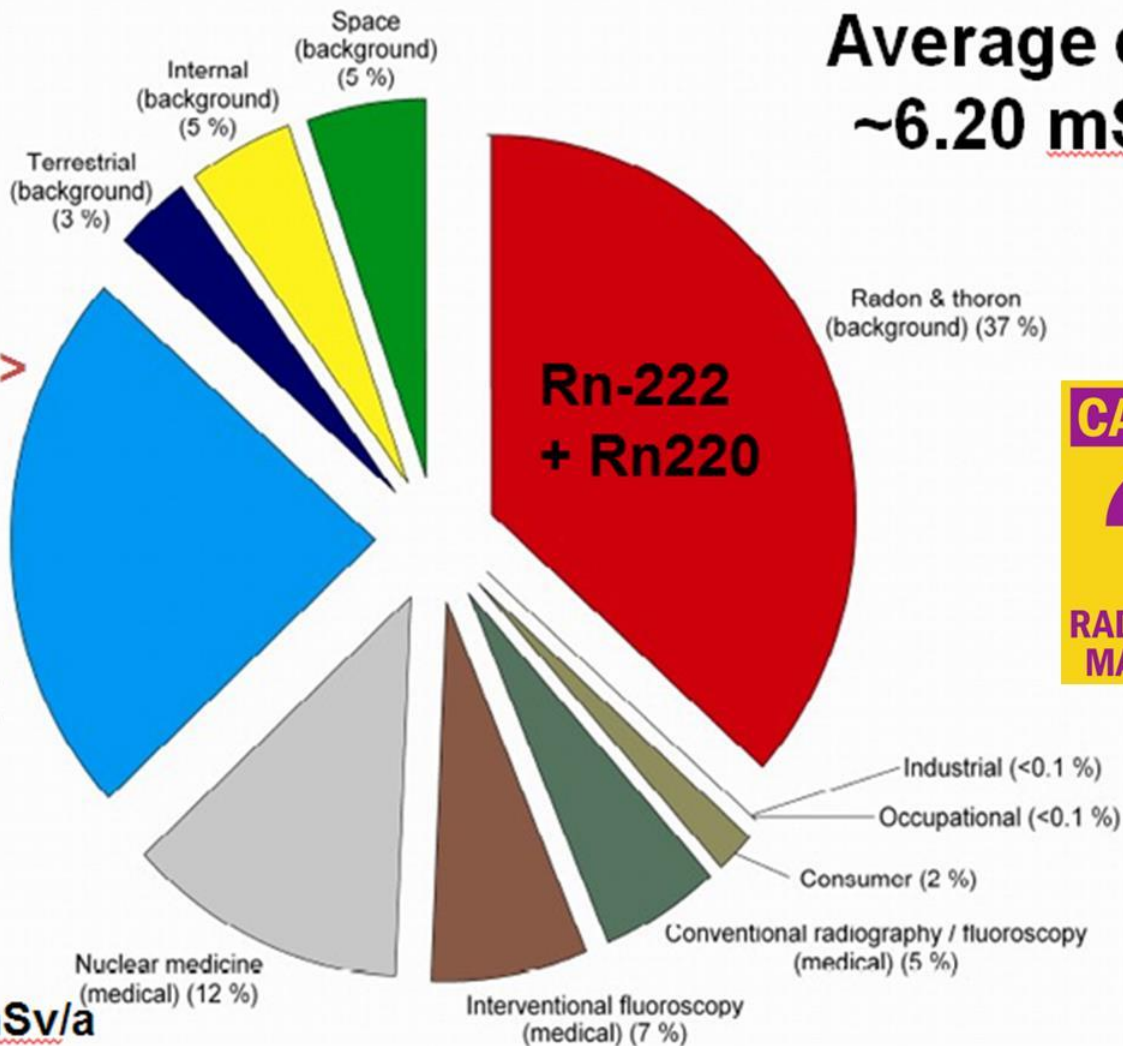


All Exposure Categories
Collective Effective Dose (percent), 2006

NCRP Rpt. 160

**Average dose
~6.20 mSv/a**

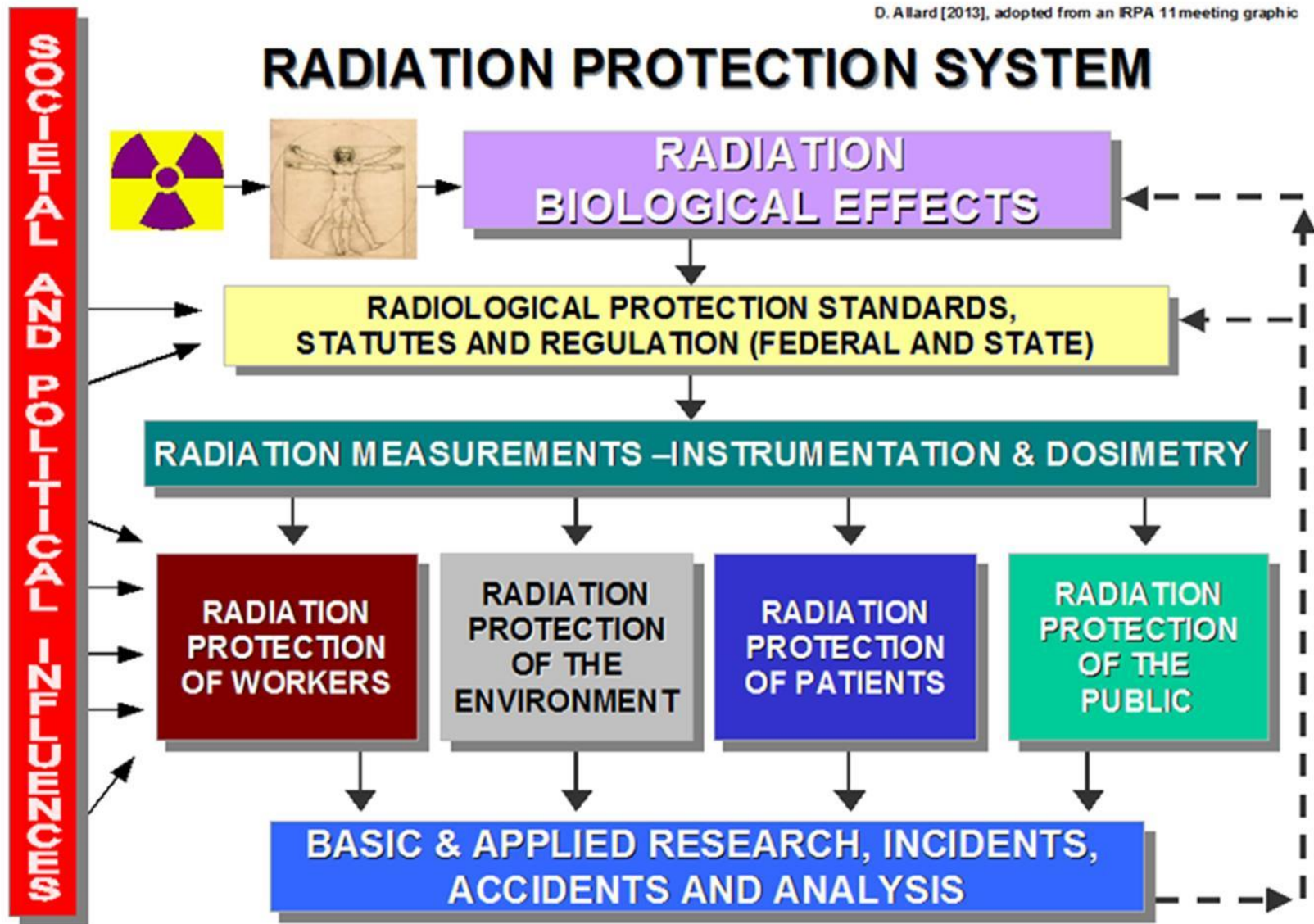
**Medical Dose
from CT >**



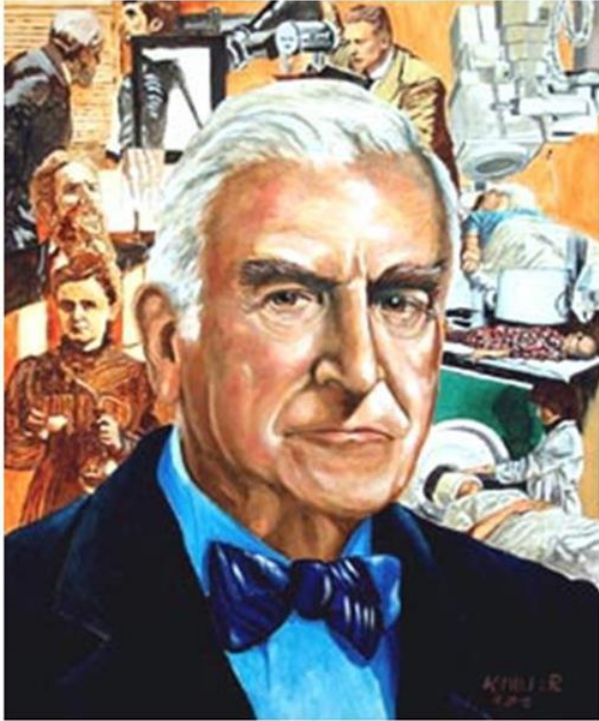
^ 1986 Ave: ~3.60 mSv/a

Rev 10-14-2015

RADIATION PROTECTION SYSTEM



Lauriston S. Taylor



Taylor painting by Ken Miller

“Radiation protection is not only a matter of science. It is a problem of philosophy, and morality, and the utmost wisdom.”

(L.S. Taylor, 1956)



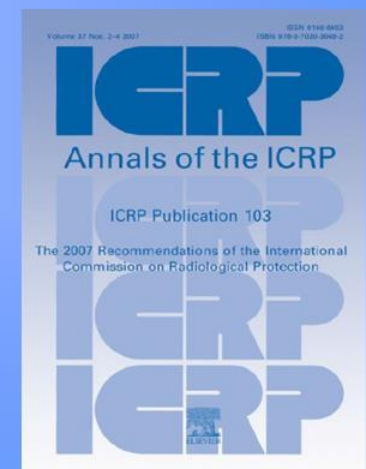
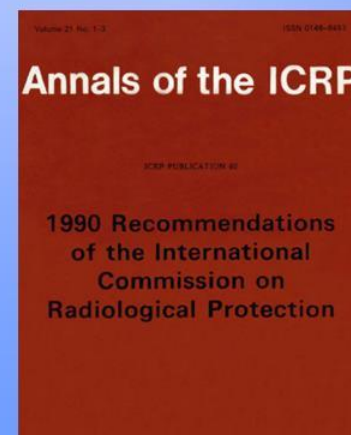
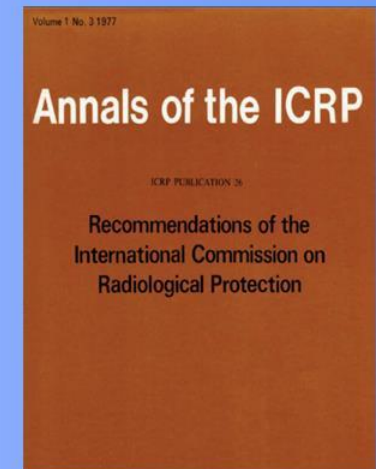
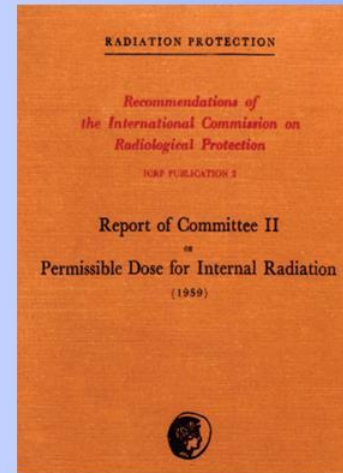
ICRP Recommendations

- Justification
- Optimization [ALARA]
- Limitation

> Existing Conditions

> Planned Scenarios

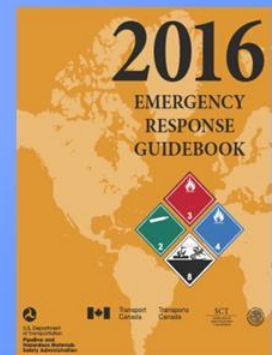
> Emergencies





Regulatory Framework

- Environmental Protection Agency (EPA)
- Nuclear Regulatory Commission (NRC)
- Dept. of Energy (DOE)
- Dept. of Labor - Occupational Safety & Health Administration (OSHA)
- Dept. of Transportation (DOT)
- States (CRCPD SSRs)



***** External Radiation *****



ICRP: 20 mSv/a [Pub. No. 103]

NRC: 50 mSv/a [10CFR20]

OSHA: up to 120 mSv/a [29CFR1910.1096]



*** Radon ***



EPA: 4 pCi/L public 'action level'

ICRP: 300 Bq/m³ (8.1 pCi/L) 'reference level'

NRC: 30 pCi/L workers [10CFR20]



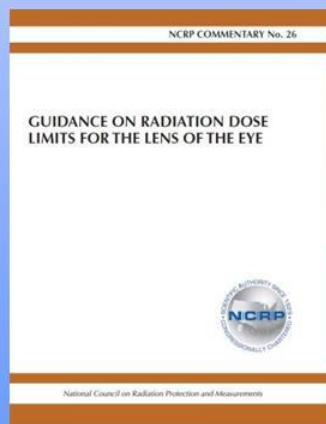
OSHA: 100 pCi/L workers [29CFR1910.1096]



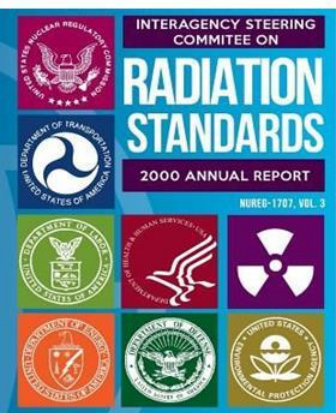
Normalize National Radiation Protection Regulations

Specifically –

NRC, DOE, DOT, EPA and OSHA



New Lens of the Eye Dose Limit?



NCRP and ISCORS



CRCPD - A Partnership Dedicated to Radiation Protection



Thank You



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Dedicated to Radiation Protection*