



# **ACMUI Review of ICRP 2005 Recommendations**

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# **Extent of Comments**

- **Comments limited to items of greatest interest to ACMUI**
- **No comments on environmental recommendations**

# Justification

## ICRP 2005 on justification of medical exposure:

- Justification of practice
- Justification of procedures
- **ACMUI agrees**

# ICRP Constraints

- **Restrictions on dose: constraints**
- **Achieving constraints: obligatory**
- **Exceeding constraints: failure**
- **ACMUI position**

# Example of Constraint

**ICRP recommended declared pregnant worker constraint: 1mSv**

**ACMUI view:**

- **Current limit of 5 mSv is safe**
- **1 mSv may be appropriate ALARA goal for some; not constraint**

# **Typical Doses to Medical Personnel**

- **Cardiac Lab**
- **PET**
- **Nuclear Medicine**

# Public Dose Constraint

- **ICRP: a few mSv reasonable but don't be rigid**
- **NRC: limit of 5 mSv to member of public from radioactive patient.**
- **NCRP recommends 5 mSv; 50 mSv if instructed & monitored.**

# Public Dose Constraints

- **ICRP: 0.3 mSv constraint problematic; exorbitant cost**
- **NCRP: 0.25 in general; 1.0 for medical facilities shielded per NCRP recommendations**
- **ALARA still works**



# Public Dose Limits

- **NCRP Statement 10 (2004):**
  - **1 mSv limit to members of public**
  - **5 mSv recommended for caregivers of radiation therapy patients**
  - **50 mSv limit; trained & monitored**

# **Worker Dose Limits**

- **Pregnant worker: 1 mSv per term problematic, risk very low**
- **Workers: 20 mSv problematic for some**
- **ACMUI supports NCRP recommendation & current NRC annual limit of 50 mSv**

# Conclusions

- **ICRP proposed constraints confusing and problematic**
- **ICRP proposed occupational limits problematic for some modalities**