## 1. Compute dD/dt for a

 gamma beam with $\mathrm{E}=3 \mathrm{MeV}$ and $\Phi=10^{7} \mathrm{~cm}^{-2} \mathrm{~s}^{-1}$ in air and water2. Compute $\mathrm{dD} / \mathrm{dt}$ in water for a 100 mCi source of Co60 at a distance of 1 cm
3. Find the rate of 4100

MeV Carbon ions needed to
yield $2 G y$ in $1 \mathrm{~min}, 1 \mathrm{~mm}$ before end of range

