

## Jet Flight Exposure

Because the atmosphere gets less dense as the elevation increases, the cosmic radiation dose is higher with increasing elevation. Therefore, passengers and crew members on a jet airplane receive an additional dose from cosmic rays during the flight. According to the National Council on Radiation Protection and Measurements, cosmic exposure at 11,887 meters is 0.5 millirem per hour.

**Directions:** Figure the extra radiation exposure from cosmic radiation for the jet flights listed below.

Flight	Round Trip Flight Time	Extra Radiation Exposure
San Francisco to Washington, DC	12 hours	6 millirem
Atlanta to Chicago	4 hours	2 millirem
Dallas/Ft. Worth to Chicago	4 hours	2 millirem
Boston to Los Angeles	10 hours	5 millirem
Chicago to Honolulu	18 hours	9 millirem
New York to Las Vegas	10 hours	5 millirem