The radiation exposure due to galactic cosmic rays has been rising since early 2015 and is reaching some of the highest levels observed in the space age. This observation is not limited to the near-Earth space environment, but is also seen at Mars in measurements performed by the highly capable Radiation Assessment Detector (RAD) on NASA’s Curiosity rover. We will discuss the increased radiation exposure at Mars and elsewhere, put into the larger heliospheric context and discuss implications for human exploration.