For each natural number \( n \geq 4 \), we determine the unique lowest volume hyperbolic 3–orbifold whose torsion orders are bounded below by \( n \). This lowest volume orbifold has base space the 3–sphere and singular locus the figure–8 knot, marked \( n \). We apply this result to give sharp lower bounds on the volume of a hyperbolic manifold or hyperbolic knot complement in terms of the order of elements in its symmetry group. (Received August 10, 2015)