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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)