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Nate R Harman* (nateharman1234@yahoo.com), 56 Cowls Rd, Amherst, MA 01003. *Families of Half-Transitive Graphs.*

A graph is called half-transitive, or $\frac{1}{2}$ -arc transitive, if it is both vertex and edge transitive but not arc-transitive. In a recent survey of edge transitive graphs of small order this type of symmetry was by far the least common, and only a handful of constructions for such graphs were previously known. We give several new constructions for infinite families of half-transitive graphs, and introduce new methods for preventing the occurrence of unwanted symmetries. (Received September 21, 2011)