This review considers the use of short, intermediate, and/or long acting stimulants, such as, methylphenidate, amphetamine, dextro-amphetamine, and lisdexamfetamine, in children and adults. Many persons with attention-deficit/hyperactivity disorder (ADHD) require individualized, optimal dose-titration to address symptoms, and it is recommended that patients start on the lowest possible dose and titrate upwards to appropriately manage symptoms. This review aims to address concerns regarding the effectiveness and safety of the use of stimulants at higher than recommended doses.