

Researchers Consider the Status of Physical Activity and Health in Young Children

Members of the 2018 Physical Activity Guidelines Advisory Committee have conducted a review of physical activity and health in children younger than six. Comprised of researchers from across the country and led by professor of [exercise science](#) and director of the [Children's Physical Activity Research Group](#) (University of South Carolina, [Arnold School of Public Health](#)) [Russell Pate](#), the group examined the associations between physical activity and health outcomes in young children. Their paper was published in the journal [Medicine and Science in Sports and Exercise](#).

For this project, the authors identified randomized controlled trials and prospective cohort studies that investigated the relationship between physical activity and adiposity/weight status, bone health, cardiometabolic health and cognition in children younger than six years old. They found 27 studies that met these criteria and served as the basis for this systematic review.

Twelve of the 15 studies that examined adiposity/weight status found higher levels of physical activity to be associated with reduced risk of excessive gains in weight and/or adiposity. Nine of 10 studies on bone health showed stronger bone in more active children. Among the three studies on cardiometabolic health and the two cognition studies, the findings were limited and inconsistent. Evidence of dose-response relationships and effect modification by demographic factors was very limited for all of the health outcomes.

The authors concluded that there is strong evidence indicating that higher amounts of physical activity are associated with better indicators of bone health and with reduced risk for excessive increases in weight and adiposity in children ages three to six years. There was not enough evidence to support conclusions regarding the effects of physical activity on cardiometabolic health and cognition. The findings of this review informed development of a physical activity recommendation for 3-5-year-old children that was included in the 2018 Physical Activity Guidelines for Americans.