

HEALTHY PEOPLE 2020

CRITICAL INDICATORS FOR ADOLESCENTS AND YOUNG ADULTS



Proportion of adolescents who meet physical activity recommended guidelines

Overview

Regular physical activity can produce long-term health benefits.¹ Children and adolescents should get at least one hour of physical activity per day, but many fall short of this recommendation. Many evidence-based strategies support ways for youth to be more physically active. Homes, schools and communities can implement these strategies.

Importance of physical activity

Physical activity has both short-term and long-term benefits.^{2,3} Regular physical activity has been shown to decrease risk factors for chronic diseases such as heart disease, hypertension, type 2 diabetes and osteoporosis.¹

A wide range of studies positively associate school-based physical activity with student academic performance. Research shows that more regular and extended PE tends to predict improved

classroom behavior.⁴ Research also shows that exercise can reduce symptoms of depression in adolescents.⁵ The relationship between physical activity and academic achievement is also strong.⁶ Oregon and national data on 11th graders who reported getting mostly A's or B's shows:

- 38% were more likely to have been physically active for at least 60 minutes per day five days per week;
- 63% were less likely to watch television at least an hour per day on an average school day.⁷



Percent Oregon youth meeting CDC guidelines on physical activity

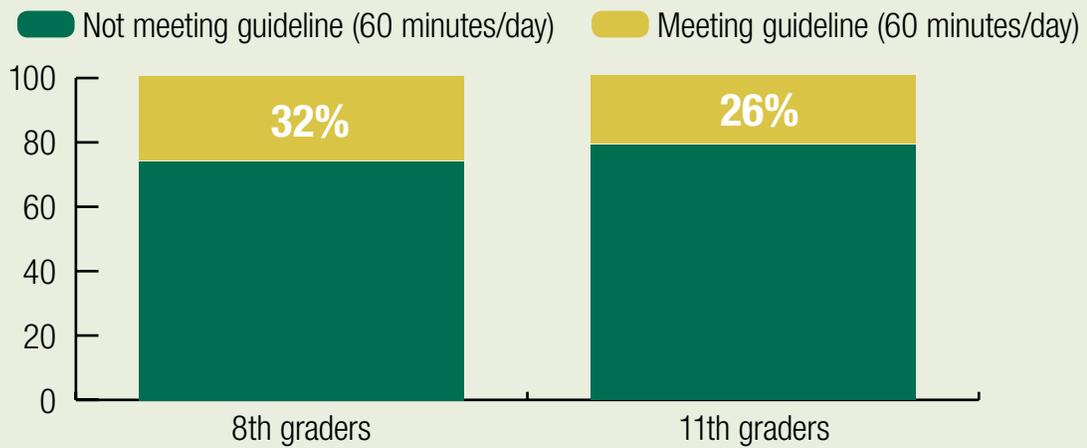


Figure 1

2013 Oregon Healthy Teens Survey

Physical activity among Oregon youth

In 2013, only 32% of Oregon eighth graders and 26% of 11th graders reported being physically active for at least 60 minutes every day (see Figure 1). Girls tend to be significantly less active than boys are, particularly when it comes to muscle-strengthening exercises. Almost twice as many girls as boys report doing no muscle-strengthening exercises.⁷



Community strategy — active transportation and safety

Walking to school is one way for children and youth to get consistent physical activity. According to the 2013 Oregon Healthy Teens Survey (see Figure 2), approximately one in five eighth graders and one in six 11th graders walk to school every day.⁷ Improved city planning and organizations like Safe Routes to School National Partnership and the National Center for Safe Routes to School can help increase the number of students using active modes of transportation and getting physical activity to and from school.

Neighborhoods have a large impact on the amount of physical activity youth get outside of school.⁸ Youth with limited access to public and private recreation sites are less physically active.⁹ Creating safe community parks and trails can improve youth physical activity.¹⁰

Primary method of school transportation: Oregon 11th graders

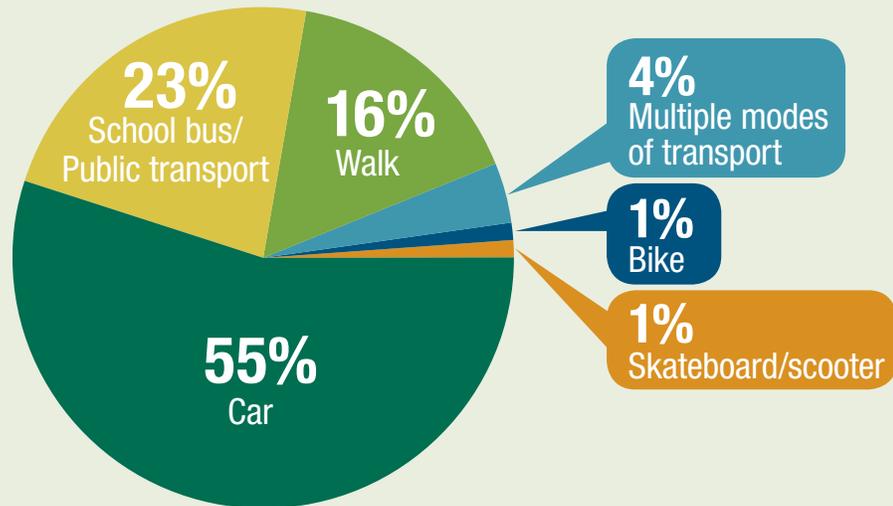


Figure 2

2013 Oregon Healthy Teens Survey

School strategy — Oregon physical education legislation

Physical education (PE) positively affects attention and behavior in the classroom.^{5,11,12} Studies consistently show that taking time for PE and other physical activity from reading or math has no negative effect on academic performance or test scores.^{13,14,15} Plus, the majority of parents believe that physical education is at least as important as other academic subjects.¹³

In 2007, the Oregon Legislature passed House Bill 3141. It requires that, by 2017, all Oregon public schools provide students with a minimum number of PE minutes per week (150 minutes for elementary schools and 225 minutes for middle schools). Currently, most of Oregon's elementary schools provide students an average of 75 minutes of PE per week and middle school students 135 minutes of PE per week, far from the goal set for 2017.¹¹

Major challenges include:

- Lack of facilities in schools districts to hold PE;
- Cutting PE programs and teachers to meet budget reduction requirements. This translates into fewer opportunities for PE and/or leaves elementary teachers with the task of teaching PE without necessary training or equipment.¹¹

What families and caregivers can do

Families have a huge influence on how children and adolescents form healthy physical activity habits early in life.¹⁶ To help support their children's level of physical activity, parents and guardians can:¹⁰

- Model positive physical activity;
- Set limits on recreational screen time;
- Help children be active with their friends;
- Plan family activities that involve being active (e.g., going to the park, camping trips, hiking).

Resources

- **Let's Move** www.letsmove.gov/get-active
- **The Wellness Impact: Enhancing Academic Success through Healthy School Environments**
www.nationaldairycouncil.org/ChildNutrition/Documents/Wellness%20Impact%20Report.pdf
- **Action for Healthy Kids**
www.actionforhealthykids.org/
- **Fuel Up to Play 60!**
<https://school.fueluptoplay60.com/home.php>
- **Physical Activity Tools and Resources**
www.nhlbi.nih.gov/health/educational/wecan/tools-resources/physical-activity.htm

References

1. U.S. Department of Health and Human Services. (2008). Physical activity guidelines for Americans. Retrieved March 3, 2015, from www.health.gov/paguidelines/pdf/paguide.pdf.
2. Herman KM, Craig C, Gauvin L, Katzmarzyk PT. (2009, October). Tracking of obesity and physical activity from childhood to adulthood: The Physical Activity Longitudinal Study. *International Journal of Pediatric Obesity*. Vol. 4 Issue 4, 281-288.
3. Telama R, Yang X, Leskinen E, Kankaanpaa A, Hirvensalo M, Tammelin T, Viikari JS, Raitakari OT. (2014, May). Tracking of physical activity from early childhood through youth into adulthood. *Med Sci Sports Exerc* Vol. 46 (5), 955-62.
4. Dwyer T, Blizzard L, Dean K. (1996). Physical activity and performance in children. *Nutrition Reviews* 54 (4 Pt 2):S27–S31.
5. Nabkasorn C, Miyai N, Sootmongkol A, Junprasert S, Yamamoto H, Arita M, Miyashita K. (2005, August). Effects of physical exercise on depression, neuroendocrine stress hormones and physiological fitness in adolescent females with depressive symptoms. *European Journal of Public Health*, Vol.16, No.2, 179-184.
6. Donnelly JE, Greene JL, Gibson CA, Smith BG, Washburn RA, et al. (2009). Physical activity across the curriculum (PAAC): a randomized controlled trial to promote physical activity and diminish overweight and obesity in elementary school children. *Preventive Medicine*, 49(4): 336-41.
7. Oregon Health Authority. Oregon Healthy Teens Survey, 2013. Retrieved March 4, 2015, from <https://public.health.oregon.gov/BirthDeathCertificates/Surveys/OregonHealthyTeens/results/Pages/Results2013.aspx>.
8. Grow HM, Saelens BE, Kerr J, Durant NH, Norman GJ, Sallis JF. (2008). Where are youth active? Roles of proximity, active transport, and built environment. *Med Sci Sports Exer*,40(12).2071-2079.
9. Larsen G, Nelson P, Page MC, Popkin P, Barry M. (2006). Inequality in the built environment underlies key health disparities in physical activity and obesity. *Pediatrics*; 117; 417-424.
10. Centers for Disease Control and Prevention. (2013). Youth physical activity guidelines toolkit. Atlanta, GA: U.S. Department of Health and Human Services. Retrieved March 4, 2015, from www.cdc.gov/HealthyYouth/physicalactivity/guidelines.htm.
11. Sipe H. (2013, February). Oregon Department of Education: Physical education legislative report. Retrieved March 4, 2015, from www.ode.state.or.us/teachlearn/subjects/pe/2010-12-pe-legislative-report.pdf.
12. Geier AB, Foster GD, Womble LG, McLaughlin J, Borradaile KE, Nachmani J, Sherman S, Kumanyika S, Shults J. (2007). The relationship between relative weight and school attendance among elementary school children. *Obesity*, 15: 2157–2161. doi: 10.1038/oby.2007.256.
13. Centers for Disease Control and Prevention. (2010). State indicator report on physical activity, Atlanta, GA: U.S. Department of Health and Human Services.
14. Rasberry CN, Lee SM, Robin L, Laris BA, Russell LA, Coyle KK, Nihiser AJ. (2011, June). The association between school-based physical activity, including physical education, and academic performance: a systematic review of the literature. *Preventive Medicine*; Vol. 52 Suppl 1, S10-20.
15. Dills AK, Morgan HN, Rotthoff KW. (2011, October). Recess, physical education, and elementary school student outcomes. *Economics of Education Review*, v30 n5 889-900.
16. Sallis JF, Prochaska JJ, Taylor WC. (2000). A review of correlates of physical activity of children and adolescents. *Med. Sci. Sports Exerc.*, Vol. 32, No. 5, 963–975.