



PROMOTING OUTDOOR TIME FOR HEALTH AND WELLNESS

A RESOURCE GUIDE FOR HEALTH CARE PROFESSIONALS

Developed by the Children's Forest of Central Oregon

Spending time outdoors plays an important role in the health and wellness of children and families. As a health care provider, you have the opportunity to educate families about all of the benefits nature provides, and encourage families to take advantage of resources that are available in the community.

3 STEPS YOU CAN TAKE:

- **Discuss and share information** with children and families on the benefits of nature for our overall health and wellness.
- **Refer children and their families** to opportunities that connect them with nature and encourage them to access the outdoors. If getting outside is intimidating for families, help them identify an easy first step, like visiting a neighborhood park.
- **Stay informed about and promote** local upcoming events and programs that get kids outside. There are many free and affordable nature programs across Central Oregon, plus a great network of local parks and public lands. See the Central Oregon Outdoor Family Resource Guide or visit our website, www.childrensforestco.org to learn more.

WHY DOES THIS MATTER?

Studies show that spending time in nature improves emotional and physical well-being. Outdoor play reduces stress, increases ability to focus, strengthens the immune system, lowers blood pressure, and builds muscle mass.



WHAT IS THE CHILDREN'S FOREST?

The Children's Forest of Central Oregon is not a physical place, it's a partnership between local agencies to enhance the lives of kids by connecting them with nature. Our network of 20+ partners represents health, education, recreation, public lands, and conservation. We work together to ensure that all kids have opportunities to learn, play, and explore in nature, both during the school day, and through family experiences in nature.

It's up to us. Together, we can inspire families to get outside and live healthier, happier lives.

NATURE CAN IMPROVE HEALTH AND WELLBEING

Spending time in nature provides children with a wide range of health benefits.

HEALTHY BABIES

Nature exposure for mothers can promote:



HEALTHY EYES AND VITAMIN D LEVELS

Time spent in bright sunlight can:



NATURE CONTACT IS especially beneficial for mothers of lower education and socio-economic levels^{2, 3, 4}

INCREASED PHYSICAL ACTIVITY

Access to parks and greenspace can foster:

INCREASED PHYSICAL ACTIVITY^{11,12}

REDUCED RISK OF OBESITY¹³

OUTDOOR PLAY increases the likelihood that girls will remain active into adolescence⁹

Children are better able to cope with stress when they live near trees and other greenery.^{15, 16}

SOCIAL-EMOTIONAL WELLBEING

Learning in nature can support:

IMPROVED RELATIONSHIP SKILLS^{17, 20}

REDUCED STRESS¹⁷ ANGER^{18,19} AND AGGRESSION^{18,19}

children & nature NETWORK

NLC NATIONAL LEAGUE OF CITIES

THE JPB FOUNDATION

ADDITIONAL RESEARCH ON THE BENEFITS OF NATURE AVAILABLE AT childrenandnature.org/research

SUPPORTING RESEARCH

¹Dzhambov et al. (2014). Association between residential greenness and birth weight: Systematic review and meta-analysis. *Urban For Urban Gree*, 13(4), 621-629. ²Markevych et al. (2014). Surrounding greenness and birth weight: Results from the GINIplus and LISAPlus birth cohorts in Munich. *Health Place*, 26, 39-46. ³Dadvand et al. (2014). Inequality, green spaces, and pregnant women: Roles of ethnicity and individual and neighbourhood socioeconomic status. *Environ Inter*, 71, 101-108. ⁴Agay-Shay et al. (2014). Green spaces and adverse pregnancy outcomes. *Occup Environ Med*, 71(8), 562-9. ⁵French et al. (2013). Time outdoors and the prevention of myopia. *Exp Eye Res*, 114, 58-68. ⁶He et al. (2015). Effect of time spent outdoors at school on the development of myopia among children in China. *JAMA*, 314(11), 1142-1148. ⁷Dolgin (2015). The myopia boom: Short-sightedness is reaching epidemic proportions. Some scientists think they have found a reason why. *Nature*, 519, 276 - 278. ⁸McCurdy et al. (2010). Using nature and outdoor activity to improve children's health. *Curr Prob Pediatr Adolesc Health Care*, 40(5), 102-117. ⁹Pagels et al. (2014). A repeated measurement study investigating the impact of school outdoor environment upon physical activity across ages and seasons in Swedish second, fifth and eighth graders. *BMC Public Health*, 14(1), 803. ¹⁰Almanza et al. (2012). A study of community design, greenness, and physical activity in children using satellite, GPS and accelerometer data. *Health Place*, 18(1), 46-54. ¹¹Hartig et al. (2014). Nature and health. *Ann Rev Publ Health*, 35, 207-28. ¹²Christian et al. (2015). The influence of the neighborhood physical environment on early child health and development: A review and call for research. *Health Place*, 33, 25-36. ¹³Wolch et al. (2011). Childhood obesity and proximity to urban parks and recreational resources: A longitudinal cohort study. *Health Place*, 17(1), 207-214. ¹⁴Duncan et al. (2014). The effect of green exercise on blood pressure, heart rate and mood state in primary school children. *Int J Environ Res Public Health*, 11(4), 3678-3688. ¹⁵Wells & Evans (2003). Nearby nature: A buffer of life stress among rural children. *Environ Behav*, 35(3), 311-330. ¹⁶Corraliza et al. (2012). Nature as a moderator of stress in urban children. *Procedia - Soc Behav Sci*, 38, 253-263. ¹⁷Chawla et al. (2014). Green schoolyards as havens from stress and resources for resilience in childhood and adolescence. *Health Place*, 28, 1-13. ¹⁸Roe & Aspinall (2011). The restorative outcomes of forest school and conventional school in young people with good and poor behavior. *Urban For Urban Gree*, 10, 205-212. ¹⁹Younan et al. (2016). Environmental determinants of aggression in adolescents: Role of neighborhood green space. *J Am Acad Child Adolesc Psychiatry*, 55(7), 591-601. ²⁰Chawla (2015). Benefits of nature contact for children. *J Plan Lit*, 30(4), 433-452.

C&NN recognizes that not all studies support causal statements.

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