

Guidance on Nature's Benefits in the Development of Children and Adolescents

2024



Initiative:



#NATURE
FOR ALL



International
Pediatric
Association
Every Child · Every Age · Everywhere

Summary

This publication is aimed at pediatricians and provides a series of considerations on the importance of nature in promoting the health and development of children and adolescents. It includes information on the relationship between playing and being in nature and the healthy development of children and adolescents, as well as recommendations that can guide the work of pediatricians and other child health professionals.

CONTEXT



Children living in urban areas have fewer opportunities to enjoy being outdoors in natural environments. The effects of urbanization have resulted in distancing from nature, reduction of natural areas, environmental pollution and a lack of safety and quality in many public outdoor spaces. As a consequence, adults, youth, and children spend most of their time indoors, isolated from nature. The current structural crisis in cities results from poor urban planning and rapid urban densification, leading to a lower availability of parks and green spaces for the population of the world's largest cities. The World

Health Organization (1) supports the establishment and maintenance of urban green spaces to promote health and well-being and advocates for their contribution to healthy and sustainable cities.

Some factors that may be responsible for the lack of time spent in nature include family dynamics and urban planning, mobility, the use of electronics, consumerism, economic development, social inequality, insecurity, violence, lack of nature conservation and education. These factors are interconnected and vary in intensity depending on the socioeconomic status and specific circumstances of each individual, and tend to be more common in densely populated cities and neighborhoods with high social vulnerability.

Another highly relevant element in this context is the triple planetary crisis facing humanity at this moment, which involves the climate emergency, biodiversity loss, and environmental pollution (of air, soil, fresh water, and oceans). The three dimensions of this crisis must be addressed in an integrated and systematic manner, since each one further accelerates the other two. The triple crisis amplifies conflicts, tensions, and inequalities, increasingly placing people in vulnerable situations. Even more important, children represent one third of the global population, and although they are the least responsible for these crises, they will bear the brunt of their impact. Because they are growing and developing, girls and boys are the most directly affected.

Although the effects of the climate crisis on the physical health of children may be more visible, the psychological and mental health impacts can be equally important. Stress after experiencing an environmental disaster or uncertainties related to the future, which generate psychological and emotional pressures, has been coined “climate anxiety” or “eco-anxiety”.

The triple planetary crisis also is a crisis of the distancing of children (and adults) from nature; it reflects the loss of contact and connection of people with natural environments. To change this disconnect from nature we must bring together governments, industry, civil society, the health, environment and education sectors, as well as the media and individuals, to position children and adolescents as a priority on the climate and environmental agenda. 🌱

Children and nature: a relationship of mutual benefit



Journalist Richard Louv, author of the book *Last Child in the Woods*, (2) coined the term nature-deficit disorder to describe lack of time in nature during childhood and adolescence. It is an effective way to draw attention to an emerging issue whose symptoms, including mental and behavioral disorders, can be observed by many pediatricians in their clinics.

Exposure to nature during childhood and adolescence improves the management of chronic diseases such as diabetes, asthma, and obesity, (3) among others, reduces the risk of alcohol and drug dependence, promotes psychomotor development, and reduces behavioral problems, while also providing mental well-being, improving vitamin D levels, and decreasing the number of visits to the doctor. Contact with nature also helps foster creativity, initiative, self-confidence, decision-making ability, and problem-solving skills, which can in turn contribute to the development of multiple languages and improvement of psychomotor coordination. Other benefits include enchantment, empathy, humility, and a sense of belonging. (4)



Among children with disabilities, one study (5) showed that children who regularly visited nature-rich outdoor environments at school improved their levels of self-esteem, concentration, and participation in social settings. In the case of children with disabilities experiencing nature can also be considered a form of support or an additional care resource, with benefits that are beginning to be elucidated.

On the one hand, nature brings numerous benefits to children's health, learning, and development; on the other hand, children's connection with nature is essential for nature itself. It is through experience, education, and connection that children and young people can engage with environmental and climate issues, develop green citizenship, and become agents of change for the environment. This is the path to understanding and addressing the environmental and climate challenges of our time, to build sustainable, resilient societies with the capacity for adaptation and innovation. 🌿

Considerations for pediatricians

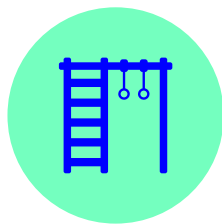


Conversations with families

- * Advise and guide families at childcare appointments about the **importance of contact with nature** for the infant and its mother.
- * **During the interview or consultation**, evaluate/advise/guide on **the benefits that contact with nature brings to children and adolescents**, and correlate them with health problems that the

child may experience (obesity, overweight, sedentary lifestyle, allergies, sleep and eating disorders, and lack of motor coordination).

- * **Give advice and guidance on the importance of outdoor play** in the child's routine. Emphasize that sports activities are very important, but that free play has special qualities that sports don't have, and that natural spaces are fundamentally optimal places for this activity. Within this context, ask how much time the child has available every day to play freely in the open air and highlight the role of the school playground in this scenario. Ask about the routines and spaces of the school the child attends. Explain the importance of nature-based playtime and emphasize that children need to have plenty of time to play freely in the open during their time at school, in order to improve concentration in their academic activities.
- * **Evaluate sleep habits, nutrition, physical activities, behaviors, school performance, use of digital devices and family dynamics**, highlighting the importance of outdoor experiences for the healthy development and well-being of the child and adolescent. Inquire about the family's favorite outdoor activities and discuss others that may not have been considered, such as birdwatching, gardening, and picnics. Evaluate with parents what are **the main barriers limiting access for everyone to engage in outdoor leisure activities** (lack of time, lack of transportation, lack of awareness of where to go and what to do, financial difficulties). Plan with children, adolescents, and their families a "nature diet" in order to ensure that they have access to nature on a daily and frequent basis:



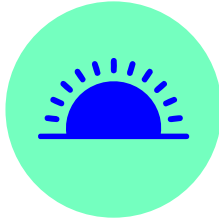
Play in the nearest playground for at least one hour per day;



Take a walk or hike in a garden or along the beachfront or lakefront;



Have a picnic in a different park once a month;



Watch the sunset and the beginning of the night sky, and look for stars;



Spend the weekend or vacation in a natural setting or where children and adolescents can move around with autonomy and freedom, with supervision and social protection rules.

- * Encourage parents of children with and without disabilities to provide nature experiences for their children, clarifying and reinforcing the importance of these activities for their physical and mental well-being, as well as for their learning. **Contact with nature can be an effective approach to promote self-esteem, concentration, and participation in social environments for these children and their families.** It can also help alleviate symptoms of anxiety and depression. For adolescents, additional benefits include a sense of greater independence and autonomy, as well as decision-making skills.
- * Consider and evaluate more closely children and adolescents with complaints related to academic and behavioral performance, such as those who present symptoms of hyperactivity and attention deficit. Advise on **the importance of ensuring that these children and adolescents have time and space to move, expend energy, and engage in play that sparks their interest and concentration.** Assess with the family the routines and physical space of the school that the child or adolescent attends and recommend more opportunities for

unstructured outdoor play, gatherings, and outdoor outings, considering the relationship between time in nature and reduction of ADHD symptoms. (6)

- * Engage in dialogue with the family about how contact with nature through the process of planting, harvesting, and preparing food can inspire healthy eating habits. This may include being more willing to try different vegetables more frequently or, consuming more fruits and vegetables.
- * When discussing injury prevention, address the difference between **beneficial outdoor exposures** (those with low consequences and high developmental gains) and common childhood hazards (such as traffic, fire, and heat). Put into perspective the long-term risks that children and adolescents face due to a sedentary lifestyle. Emphasize safety rules and recommend protection in outdoor areas (such as using insect repellent and wearing hats and using sunscreen for sun protection).



- * Participate in lectures at schools or in campaigns promoting healthy lifestyles, emphasizing the importance of daily and frequent contact with nature as a prerequisite for the health rights of all children and adolescents, and as a measure to address the climate crisis.
- * Collaborate in the development of public health policies that include access to nature as a right for all children and adolescents, as well as measures to address climate change and its impact on the health and well-being of children and adolescents.
- * Talk to families about the fact that climate change represents one of the greatest public health concerns in the 21st century and is considered one of the main (avoidable) risk factors for health, affecting everyone, although the risks may be potentially greater for children. Alert families to the fact that rising temperatures increase the risk of vector-borne diseases, as well as concentrations of atmospheric pollutants that harm brain and lung development and exacerbate respiratory problems. Also, the climate crisis increases the risk of eco-anxiety.
- * Emphasize that direct and positive experiences in nature are a powerful antidote to anxiety related to climate change. Advise families that experiences such as nature walks, river or sea baths, and other activities can enhance connection, develop a sense of belonging, increase confidence, and awaken feelings of hope in children.

Pediatric office

- * **Keep books, magazines, and movies about nature in the waiting room**, especially those that provide relevant answers to the questions frequently asked by children and adolescents about how the natural world works. Books and movies can inspire love and curiosity for life outdoors. For example, field guides about the birds in the region can inspire children, adolescents, and adults to remember the birds they have seen and make plans for an outdoor outing.
- * **Keep some natural elements in the waiting room**, such as stones and pots of aromatic plants and spices, avoiding toxic or allergenic species and using enameled pots. Give preference to wooden toys with a distinctive weight, texture, durability, traces of time and aroma, over plastic toys.

Pediatricians should unite around actions that contribute to minimizing the impacts of climate change on health, offering guidance to families and society on preventive measures and health protection on this topic.

This publication has been adapted with permission from *Guidance on Nature's Benefits in the Development of Children and Adolescents***. [The link for that report is here.](#) 🌸

References

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