



# **Physical activity of children and adolescents in Croatia: GLOBAL MATRIX 4.0 REPORT**

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Global Matrix 4.0 - Croatia



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## SUGGESTED CITATION

Pedišić, Ž., Matolić, T., Strika, M., Sorić, M., Šalaj, S., Dujić, I., Rakovac, M., Radičević, B., Podnar, H., Greblo Jurakić, Z., Jerković, M., Radašević, H., Čvrljak, J., Petračić, T., Musić Milanović, S., Lang Morović, M., Krtalić, S., Milić, M., Papić, A., Momčinović, N., Mišigoj Duraković, M., Heimer, S., Jurakić, D. (2022). Physical activity of children and adolescents in Croatia: Global Matrix 4.0 report. Zagreb: Faculty of Kinesiology, University of Zagreb.

## BACKGROUND

This report was prepared as part of the Global Matrix 4.0 on Physical Activity of Children and Adolescents initiative conducted by the Active Healthy Kids Global Alliance. Within this international initiative, experts from 57 countries gathered relevant, recent evidence on ten indicators related to physical activity promotion among children and adolescents, including: (1) overall physical activity; (2) organised sport and physical activity; (3) active play; (4) active transportation; (5) sedentary behaviour; (6) physical fitness; (7) family and peers; (8) school; (9) community and environment; and (10) government, and summarised it in their national reports.<sup>1</sup> Country reports and other information about the Global Matrix 4.0 initiative can be found on <https://www.activehealthykids.org/4-0/>.

## METHODS

The Croatian expert panel included 18 members with knowledge and experience in physical activity and public health promotion, physical activity and sedentary behaviour research, physical education, school sports, governance in the sports sector, and funding and management of sports associations. A systematic review of scientific literature on physical activity of Croatian children and adolescents and associated personal, social, environmental, and policy factors was conducted in Hrčak, PubMed/MEDLINE, Scopus, SPORTDiscus, and Web of Science Core Collection databases. Additional searches were conducted on Google and through authors' personal collections of relevant publications. We also re-analysed data from six studies to obtain information needed for the expert panel evaluation. Based on the results of 90 studies published from the 1<sup>st</sup> of January, 2012 to the 15<sup>th</sup> of April, 2022 the expert panel assigned one of the following grades to each of the Global Matrix indicators: F (<20.0%; "We are succeeding with very few children and adolescents"); D- (20.0 – 26.9%); D (27.0 – 33.9%); D+ (34.0 – 39.9%); C- (40.0 – 46.9%); C (47.0 – 53.9%); C+ (54.0 – 59.9%); B- (60.0 – 66.9%); B (67.0 – 73.9%); B+ (74.0 – 79.9%); A- (80.0 – 86.9%); A (87.0 – 93.9%); A+ (94.0 – 100.0%; "We are succeeding with a large majority of children and adolescents"). A detailed description of the methods can be found elsewhere.<sup>2</sup>

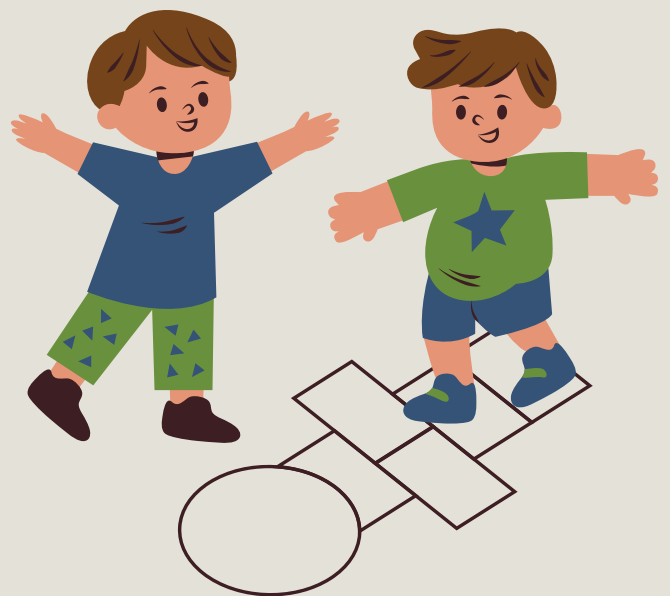
# OVERALL PHYSICAL ACTIVITY

## FINDINGS

- The prevalence of children and adolescents who spend at least 60 minutes in moderate-to-vigorous physical activity on each day is in the range between 13.0% (for 15-year-old girls) and 30.9% (for 11-year-old boys)<sup>3</sup>
- The prevalence of children and adolescents who spend at least 60 minutes per day on at least four days a week in moderate-to-vigorous physical activity is in the range between 45.5% (for 15-year-old girls) and 76.1% (for 11-year-old boys)<sup>3</sup>
- The prevalence of physical activity is lower among girls than among boys<sup>3</sup>
- Physical activity level of children and adolescents has declined over the last 10 years<sup>3,4</sup>

## TOP PRIORITIES

- Reverse the trend of decline in physical activity
- Place focus on physical activity promotion among girls
- Prevent a decline in physical activity in the transition from primary school to secondary school



## GRADE

**B-** (for international comparisons)

**D-** (for domestic purposes)

# ORGANISED SPORT AND PHYSICAL ACTIVITY

## FINDINGS

- >50% of preschoolers and primary school students participate in organised sports<sup>5,6</sup>
- 30% of secondary school students participate in organised sports<sup>6</sup>
- Participation in organised sports is higher among boys than among girls<sup>7-11</sup>
- Sports participation seems to decline in the transition from primary to secondary school<sup>6</sup>



GRADE

C-

## TOP PRIORITIES

- Prevent a decline in participation in organised sport and physical activity in the transitions from preschool to primary school and from primary school to secondary school
- Place focus on the promotion of organised sport and physical activity among girls
- Increase the participation of primary and secondary school students in school sports clubs



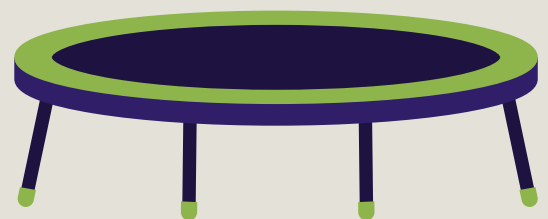
# ACTIVE PLAY

## FINDINGS

- 68% of kindergarten and preschool children spend more than two hours per day playing outdoors<sup>12</sup>
- 40% of primary school students engage in non-organised physical activity on at least four days per week<sup>6</sup>
- 22% of secondary school students engage in non-organised physical activity on at least four days per week<sup>6</sup>
- Participation in active play is lower on weekdays than on weekends<sup>13</sup>

## TOP PRIORITIES

- Prevent a decline in participation in recreational, non-organised physical activity in the transition from primary school to secondary school
- Increase participation in active play on weekdays
- Increase the time spent outdoors



GRADE

C





# ACTIVE TRANSPORTATION

## FINDINGS

- 70% of students use active modes of transport on their way to and/or from primary school<sup>14</sup>
- 29% of students use active modes of transport on their way to and/or from secondary school<sup>7-11</sup>
- Active commuting seems to decline in the transition from primary to secondary school<sup>7-11 14</sup>

## TOP PRIORITIES

- Promote active transportation among both primary and secondary school students
- Prevent a decline in using active transportation in the transition from primary school to secondary school
- Improve monitoring of active transportation among preschool children



GRADE

C-

# SEDENTARY BEHAVIOUR

## FINDINGS

- 74% of preschool children spend more than two hours per day in front of the screen<sup>5</sup>
- 52% of primary school students spend more than two hours per day in front of the screen<sup>14</sup>
- 60% of secondary school students spend more than two hours per day in front of the screen<sup>3</sup>
- Excessive screen time is more prevalent among boys than among girls<sup>3</sup>



GRADE

D+

## TOP PRIORITIES

- Focus on reducing sedentary screen time among preschool children
- Prevent an increase in sedentary screen time in the transition from primary school to secondary school
- Focus on reducing sedentary screen time among boys



# PHYSICAL FITNESS

## FINDINGS

- 79% of adolescents achieve satisfactory results in the standing broad jump test<sup>15</sup>
- 74% of adolescents achieve satisfactory results in the 20-m shuttle run test<sup>15</sup>
- No data from a national representative sample are available for flamingo balance, plate tapping, sit-and-reach, handgrip strength, sit-ups in 30 seconds, bent-arm hang, and 10 x 5-m agility shuttle run tests<sup>2</sup>
- No recent data from a national representative sample are available for physical fitness among children

GRADE

**INCONCLUSIVE**

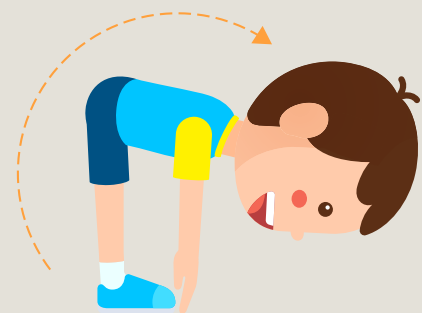
(for international comparisons)

**B+**

(for domestic purposes)

## TOP PRIORITIES

- Maintain high levels of aerobic and muscular fitness
- Assess other aspects of physical fitness
- Establish a national surveillance system for physical fitness among children and adolescents



## FAMILY AND PEERS

### FINDINGS

- 5% of parents and guardians volunteer in the sports sector<sup>16</sup>
- 20% of adult family members act as role models by exercising, playing sports, or engaging in recreational activities at least once a week<sup>17</sup>
- 56% of parents and guardians occasionally engage in physical activities with their kids<sup>12</sup>
- >90% of children and adolescents are supported by their parents or guardians to engage in physical activity<sup>7-11</sup>



GRADE

D+

### TOP PRIORITIES

- Increase the involvement of parents of children and adolescents in volunteering in the sports sector
- Promote physical activity among parents of children and adolescents, to improve their physical activity role modelling
- Maintain the high prevalence of parents who support their children to be physically active



## SCHOOL

### FINDINGS

- All schools offer the mandated amount of physical education to their students<sup>2</sup>
- <6% of grade 1 – 4 primary school teachers (who are not physical education teachers) feel fully competent to teach physical education<sup>18</sup>
- 68% of schools have a school sports club<sup>2</sup>
- <70% of school gymnasiums meet the national quality standards<sup>19</sup>



GRADE

B-

### TOP PRIORITIES

- Increase the competences of grade 1 – 4 primary school teachers (not physical education teachers) for teaching physical education
- Increase the number of schools with their own (or access to) gymnasiums that meet national quality standards
- Increase the number of schools that have school sports clubs



# COMMUNITY AND ENVIRONMENT

## FINDINGS

- All counties have infrastructure, programmes, and/or policies that support physical activity promotion
- 44% of parents and guardians think that the local authorities in their area of residence are doing enough to facilitate physical activity<sup>16</sup>
- 80% of parents and guardians think that the conditions for child active play in their area of residence are adequate<sup>5</sup>
- Only 13% of parents and guardians are satisfied with the quality of bike paths<sup>20</sup>

GRADE

B-

## TOP PRIORITIES

- Improve the opportunities for children and adolescents to engage in physical activity in their local areas
- Improve the quality and safety of built infrastructure for active transportation, especially bike paths
- Maintain the county-level policies, programmes, and infrastructure that effectively support physical activity



## GOVERNMENT

### FINDINGS

- Several national policies and programmes support the promotion of physical activity among children and adolescents<sup>2</sup>
- Standalone national strategy and action plan for physical activity have not been issued<sup>2</sup>
- In the national budget, more emphasis could be put on the promotion of health-enhancing physical activity<sup>21</sup>
- Stakeholders in the sport and public health sectors think that the commitment of the national Government to the promotion of health-enhancing physical activity is moderate<sup>22 23</sup>

### TOP PRIORITIES

- Develop standalone national physical activity strategy and national physical activity action plan
- In the national budget, put more emphasis specifically on the promotion of health-enhancing physical activity, including sports-for-all
- Increase participation rates in national programmes and initiatives for the promotion of physical activity

GRADE

D+



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