

# Child and adolescent health

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**T**he World Health Organisation's (WHO) definition of health focuses on positive aspects, indicating that health "is a state of complete physical, mental and social well-being, not merely the absence of disease or infirmity" (WHO, 1948). Although criticised as being too general and ill-suited to the current times, it sets the aspirational direction of thinking about health not only as physical wellbeing, but also good mental and social functioning. Health indicators are among the main determinants of civilisational development. Childhood is a special period in considering health, as disruption of physical or mental wellbeing during this period can hinder developmental processes and lead to long-term health problems. In this chapter, we will look at selected aspects of the physical health status of children and adolescents in Poland, with a particular focus on the youngest children and with the full awareness that only a fragment of this complex issue will be presented. Where neither the definitions nor the statistical image have changed, the findings of the previous edition of the report *Children Count, 2017* have been used. Mental health issues are discussed in a separate chapter.

## Child and adolescent health care system in Poland

According to Article 24 of the Convention on the Rights of the Child, the child has the right "to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health". The Constitution of the Republic of Poland stipulates in Article 68 that "public authorities shall ensure special health care to children, pregnant women, handicapped people and persons of advanced age".

Care for children is provided even before they are born, based, among other things, on the so-called **Organisational Standard for Perinatal Care** introduced by the Regulation of the Minister of Health of 16 August 2018 (Dz.U. [Journal of Laws] 2018 item 1756). This standard is an important document aimed at ensuring that women and neonates have access to high-quality, evidence-based care that allows for early detection of various risks, thus increasing the safety of both mother and child. It defines, inter alia, the tasks of those providing care for pregnant women and neonates, the scope of preventive services and health promotion activities as well as diagnostic tests and medical consultations performed on women during pregnancy, risk factors for perinatal complications and ways to prevent their occurrence, antenatal education, management during childbirth, the scope of care for the neonate, the scope of care for the woman after childbirth and the neonate in the place of residence, care for the woman in special situations, e.g. diagnosis during pregnancy of a serious illness or defect in the child, miscarriage, stillbirth, non-viable birth, illness or congenital defect in the neonate.

Also, the Act of 4 November 2016 on **Support for Pregnant Women and Families – the “Pro Life Act”** (Dz.U. 2016, item 1860) discusses access to perinatal care and support for families, with particular emphasis on families of children diagnosed with a severe and irreversible disability or an incurable life-threatening illness that arose during the prenatal period or during birth.

Another legal act regulating the scope of health care for children is the Regulation of the Minister of Health of 24 September 2013 on **Guaranteed Services in Primary Health Care** (Dz.U. 2021, item 540) regulating the scope and conditions of services provided by physicians, nurses or midwives in primary health care and school nurses in the education and upbringing environment, including, inter alia, patronage advice and visits, assessment of risk factors in the family, well-child check-ups and screening tests.

Provisions on preventive care for children and adolescents in the education and upbringing environment are also found in the Act of 27 August 2004 on **Health Care Services Financed from Public Funds** (Dz.U. 2015, item 581), as well as in the Act of 7 September 1991 on the **Education System** (article 92; Dz.U. 2015, item 2156).

Regulations concerning children and young people are also included in the Act of 29 July 2005 on Counteracting Drug Addiction (Dz.U. 2020, item 2050, consolidated text) and in the Act of 26 October 1982 on Upbringing in Sobriety and Counteracting Alcoholism (Dz.U. 2021, item 1119, consolidated text), which impose on municipalities the obligation to conduct, in particular with regard to children and adolescents, preventive information, education and training activities in the field of solving drug and alcohol problems and counteracting drug addiction.

The above-mentioned legal acts are not exhaustive of all the laws under which child and adolescent health care is organised, but in view of the synthetic nature of this report, they are considered to be the most important.

## Implementation of health care – selected aspects

### Preventive check-ups and patronage advice

Polish law guarantees to all women who have given birth professional care at home in the form of visits by a midwife, the first of which should take place within 48 hours of receiving notification from the health care provider caring for the mother during childbirth. There shall be no fewer than four visits. During the visits, the midwife, among other things, assesses the state of health of the woman and the neonate, gives advice on the care and nursing of the neonate, assesses the relationship within the family, intervenes if abuse or other abnormalities are observed, gives guidance on healthy lifestyle and stress management, and assesses the capability of a close person to help and support the woman. In addition, the law sets forth the patronage advice given by physicians and nurses, as well as the scope and frequency of the well-child check-ups to which all children should be subjected.

However, according to data made available by the e-Health Centre (Centrum e-Zdrowie), in 2020, 21% of infants up to 4 weeks of age were not covered by medical care, and this percentage grew to 35% at 9 months of age (Table 1). It should be noted that 2020 was marked by pandemic restrictions and the number of infants not receiving preventive care increased markedly compared to 2019 (13% and 27%, respectively, in 2019). At the same time, there are significant differences between provinces, ranging from 59% of children covered by medical care up to 4 weeks of age in the Podkarpackie and Opolskie Voivodships in 2020, to 91% in the Kujawsko-Pomorskie Voivodship.

**Table 1.** Patronage advice and well-child check-ups including infant screening tests (provided by physicians) in 2019 and 2020

	1–4 weeks		2–6 months		9 months		12 months	
	eligible	seen	eligible	seen	eligible	seen	eligible	seen
2019	272,853	236,478	349,609	283,673	248,362	182,516	252,221	188,759
		87%		81%		73%		75%
2020	248,938	195,766	339,790	253,104	236,091	152,795	237,727	164,735
		79%		74%		65%		69%

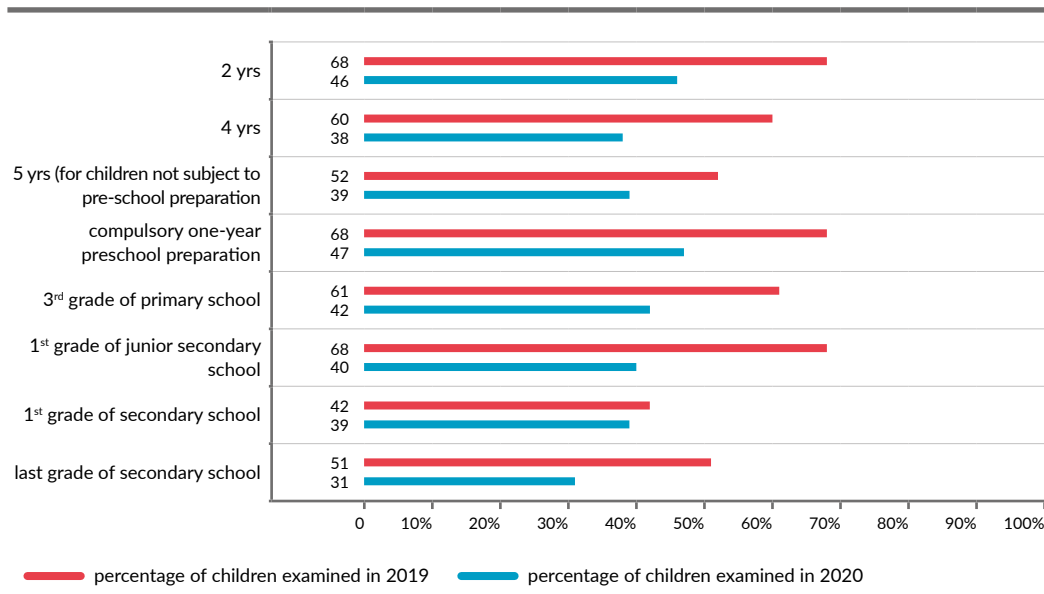
Source: Data made available by the e-Health Centre (Centrum e-Zdrowie).

The obligation to carry out a minimum of four patronage visits by a midwife in the child's home is also not fully implemented. In 2020, the average number of visits per child was 3.28, with only 30% of children up to 4 days of life receiving such a visit (guaranteed by law). It should be noted that some of the visits were carried out not actually in the patient's home, but by means of ICT systems, in accordance with the Recommendations of 30 March 2020 for Family Midwives/Primary Health Care Midwives in the State of the SARS-CoV-2 Virus Epidemic Causing COVID-19. When it comes to visits to the child's home, there was a decrease compared to 2019, when the average number of visits per child was 3.45. Also in the case of patronage visits, there is significant variation between provinces. Only four voivodships exceeded the average of four visits per neonate in 2020 (Kujawsko-Pomorskie, Lubuskie, Wielkopolskie and Zachodniopomorskie). Before the pandemic, in 2019, there were eight such provinces. At the same time, there are also provinces with an average number of visits below three. In 2020, there were seven such voivodships (Dolnośląskie, Lubelskie, Mazowieckie, Opolskie, Pomorskie, Świętokrzyskie, Warmińsko-Mazurskie), and in 2019 – six, which clearly indicates that the statutory obligation is not being fulfilled.

Surveys among mothers also confirm significant shortcomings in the implementation of this health service. In 2018, only 57% of respondents declared that there had been at least four visits by a primary health care midwife in the first months of their child's life, 25% said there had been 2–3 visits, 12% indicated that there had been only one such visit, and 6% of respondents claimed that the midwife had not visited them even once. At the same time, younger women (15–24 years) were significantly more likely to say that there had been no visits (34%) or only one visit (35%; Iwanowicz-Palus and Bogusz, 2018).

This situation is worrying, as patronage visits by appropriately trained midwives allow early detection of problems in the relationship with the child, including domestic violence, inadequate care or diet, symptoms of postpartum depression in the mother, and other factors that may pose a risk to the child's proper development and safety, or even life.

Also, preventive examinations and well-child check-ups do not cover all children – at different stages of a child's life, their implementation ranges from 51% to 68% before the pandemic in 2019, and 31–48% in 2020 during the pandemic (Figure 1).

**Figure 1.** Preventive medical examinations for children and adolescents in 2019 and 2020

Source: Data made available by the e-Health Centre (Centrum e-Zdrowie).

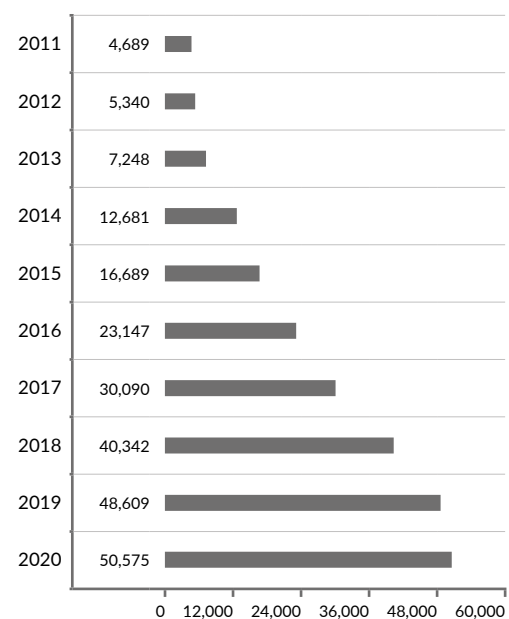
### Immunization

The immunization coverage of children in Poland remains quite high, but it can be observed that the proportion of children who do not undergo mandatory and recommended vaccinations is increasing. For some diseases, e.g. measles, the vaccination coverage level that guarantees collective immunity for the entire population is not achieved. In addition, the number of parents who refuse vaccination is increasing – in 2010, parents' refusal was the reason for the non-vaccination of about 3,500 children, in 2019. – already approximately 48.6 thousand children (Kuchar, 2021). According to data from the Statistics Poland (GUS) and National Institute of Public Health – National Institute of Hygiene (NIZP-PZH), the recorded level of immunization of children with mandatory vaccinations (at the age of 3) in 2020 decreased for all diseases compared to 2010, including:

- hepatitis B, from 99.4% to 95.4%,
- diphtheria/tetanus, from 95.6% to 85.4%,
- pertussis, from 95.6% to 85.4%,
- measles, mumps and rubella, from 98.2% to 94.8%,
- epidemic infantile paralysis (poliomyelitis, Heine-Medin disease), from 95.6% to 85.5%.

According to NIZP-PZH data, the immunization rate of neonates and infants (up to 12 months of age) against tuberculosis is also declining, currently it stands at 91.1%.

The number of children and adolescents not vaccinated due to vaccination evasion has been increasing for years (Figure 2).

**Figure 2.** Number of children and adolescents not vaccinated due to evasion of mandatory vaccinations between 2011 and 2020

Source: National Institute of Public Health – National Institute of Hygiene (NIZP-PZH; 2021).



Research conducted in 2018 shows that the most common reasons for refusing to vaccinate a child include fear of adverse reactions (64%), doubts about the efficacy of vaccines (24%), opinions of friends (3%) and information taken from the internet (3%). As many as a quarter of those opposed to immunization did not specify a reason for refusing to vaccinate (Stroba-Zelek et al., 2019).

### Barriers in accessing health care

Among the most frequently cited reasons for inequalities in access to health care are the socio-economic status of the family, the level of education, the level of health awareness, availability (measured e.g. by the number of specialists, hospital beds), spatial accessibility (distance to health centres) and organisational accessibility (measured e.g. by opening hours, appointment booking system, etc.) of health services. In the case of children and adolescents, the school and home environment is also cited, and additionally among foreign children, cultural differences and the language barrier, which is undoubtedly relevant in the current humanitarian crisis caused by the war in Ukraine.

Regarding the availability of physical health care, it can be seen from the data of the Supreme Medical Council that the number of selected child care specialists has increased slightly in recent years, e.g. paediatricians from 14,893 in 2016 to 15,147 in 2022, neonatologists from 1,484 to 1,664, paediatric cardiologists from 136 to 176, paediatric psychiatrists from 393 to 498 and paediatric surgeons from 1,101 to 1,148. However, according to data from the Ministry of Health, the number of residency positions for paediatrics-related specialties has mostly decreased in recent years, which in the long term may compound the problems of access to specialists (Table 2).

At the same time, children's waiting times for appointments with many specialists are very long. In 2020, children waited an average of 590 days for treatment at a trauma and orthopaedic surgery department, 329 days for an appointment at an orthodontic clinic, 246 days for admission to an ophthalmology department, 181 days for surgery for congenital heart and great vessels defects in children under one year of age, 171 days for an appointment at a neurosurgery clinic for children, 170 days at a paediatric

**Table 2.** Number of residency positions for physicians and dentists who will commence specialisation training on the basis of the qualification procedure conducted in 2020 and 2022

Medical specialty	Number of positions in 2020	Number of positions in 2022
paediatric surgery	51	40 ▼
paediatric pulmonary diseases	32	11 ▼
paediatric endocrinology and diabetology	0	7 ▲
paediatric gastroenterology	15	7 ▼
paediatric cardiology	7	5 ▼
family medicine	297	169 ▼
paediatric nephrology	12	9 ▼
neonatology	0	74 ▲
paediatric neurology	14	10 ▼
paediatric oncology and haematology	21	19 ▼
paediatric otorhinolaryngology	10	8 ▼
paediatrics	260	95 ▼
metabolic paediatrics	5	4 ▼
obstetrics and gynaecology	140	45 ▼
child and adolescent psychiatry	33	28 ▼
paediatric dentistry	15	7 ▼

Source: Ministry of Health (MZ), gov.pl.

endocrinology and diabetology clinic, 169 days at a metabolic diseases clinic for children and 163 days at an outpatient therapeutic rehabilitation facility/centre for children. It should be noted that significant differences persist in this regard between provinces (MZ, 2022).

## State of child health in Poland

The following part of the chapter will focus on selected aspects of child health, such as the main reasons for hospitalisation, accidents, mental health and anti-health behaviours. Particular attention is paid to the health risks of the youngest children.

### Population of children aged 0–3 years – specific problems

This section will focus on mother and child health during pregnancy and in the first years of a child's life. It is during this period that all the functions that the child will use throughout later life develop, and disruptions that occur during this time can have long-term negative effects.

#### Prenatal negligence

The pregnancy time is not only important for the parents-to-be, who are preparing for the arrival of their child, but equally so for the child, whose health and future development may depend on the behaviours and lifestyle of the pregnant woman. During pregnancy, childbirth and the postpartum period, various factors may arise that negatively affect the child's development. These include actions (prenatal abuse) or omissions (prenatal neglect) of adults, mainly the mother. These actions and omissions may be intentional or unintentional and may result from the parents' lack of knowledge and competence, their intellectual deficits, helplessness, immature personality, life history, difficulties in conceiving or a rejection of the child (Wójcik, 2007). Prenatal neglect includes behaviours such as drinking alcohol, drug use, smoking, medication abuse and lack of appropriate health care, including prenatal testing. The last two aspects may also result from impaired access to health services.

#### Perinatal care

Data on maternity care show that there is a large group of women in Poland who do not see a doctor or midwife until the final stage of gestation. For the last few years, we have been recording an increasing percentage of pregnant women who receive medical care ever later. Data on the number of consultations given to women up to the 10<sup>th</sup> week of gestation show that in 2020 the so-called early reporting rate was at 55%, while in 2015 it was at 63%. The decrease may have been due to the COVID-19 pandemic restrictions. However, this means that nearly half of women are not receiving medical care during the earliest period of pregnancy, whereas the first trimester is extremely important for the child's development – all the foundations of future development are formed during this time. The effects of teratogens, i.e. alcohol, drugs and cigarettes, among others, in the first trimester of pregnancy is particularly harmful and can lead to severe impairment in the child and even death or miscarriage. In order to motivate pregnant women to seek medical care earlier, the government in 2010 adopted a regulation making the receipt of the childbirth allowance conditional on reporting to a doctor by the 10<sup>th</sup> week of pregnancy, which was to take effect from the beginning of 2012, but did not have the expected effect (Table 3).

However, late reporting by pregnant women may be due not only to omission or tardiness, but also to barriers

**Table 3.** Percentage of pregnant women receiving medical care between 2015 and 2020

	Women who reported to a clinic for the first time		
	by the 10 <sup>th</sup> week	from 10 <sup>th</sup> to 14 <sup>th</sup> week	after 14 <sup>th</sup> week of pregnancy
2015	63%	19%	18%
2016	60%	19%	21%
2017	59%	19%	22%
2018	57%	19%	24%
2019	58%	19%	23%
2020	55%	19%	26%

Source: Own analysis based on data of the e-Health Centre.

to accessing a gynaecologist and a midwife. In November 2020, the average waiting time for an appointment at a gynaecology and obstetrics clinic in Poland was 38 days (MZ, 2022).

### Prenatal testing

In recent years, there has been an increase in the number of women undergoing prenatal tests, which allow early detection of defects in the child and treatment to be undertaken already in utero, thus helping to reduce long-term negative health effects in the child. According to data from the Ministry of Health, in 2015, more than 90.6 thousand women took advantage of such an opportunity, of whom 49 thousand were under the age of 35 and 41.6 thousand were aged 35 and over. In 2019, it was 111.7 thousand women, of whom 64.6 thousand were under 35 and 47 thousand were aged 35 and over. Although only women over the age of 35 are covered by the free prenatal screening programme, there has been a more pronounced increase in the number of younger women undergoing tests. This is all the more positive as, according to the Supreme Audit Office (NIK), in 2014 79% of children with cardiovascular defects were born to mothers younger than 35, and the incidence rate of congenital musculoskeletal malformations (per 1,000 births), although it was actually highest among women aged 40–44 (4.9) and 45 and over (5.7), was also significant in the other age groups, ranging from 4.1 among women under 19 to 3.1 among women aged 30–34 (NIK, 2016).

### Alcohol use in pregnancy

Alcohol used during pregnancy harms the child more than any other psychoactive substance, including cannabis, heroin and cocaine. When consumed by the mother, especially in the first trimester of gestation, it can cause a syndrome of birth defects, individual defects (e.g. of the heart), brain damage (resulting in mental impairment, learning difficulties), reduce the child's weight and height, increase the risk of miscarriage, death before birth or in the perinatal and neonatal period, preterm births, abnormal physical, motor and mental development after birth, e.g. abnormal neurological reflexes, ADHD and

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*I broke my leg and I'm worried about whether I'll be able to manage at school with my leg in a cast. I'm afraid that everyone will stare at me and that I won't be able to move around school at recess. I want to stay at home longer. My parents don't understand how I feel.*

13-year-old girl

A quote from phone calls and emails to 116 111 Helpline for Children and Young People

disorders of perception, orientation, attention, memory, learning, problem solving, feelings or behaviour. Drinking alcohol during pregnancy can also lead to increased child morbidity (e.g. acute myeloid leukaemia) and the foetal alcohol spectrum disorder (FASD) or foetal alcohol syndrome (FAS), which is a serious cause of delays in the child's physical and mental development (Kornas-Biela, 2012).

Public attitude to alcohol consumption by pregnant women is worrying. Research carried out by the State Agency for the Prevention of Alcohol-Related Problems (PARPA) shows that only 74% of respondents strongly agree with the statement that a pregnant woman should not drink alcohol, 15% rather agree, but as many as one in ten respondents rather or strongly disagree with the statement. In the 18–34 age group, lower rates were obtained, with 87% of respondents strongly or rather agreeing with the statement that a pregnant woman should not drink alcohol. The survey showed no differences in views on this aspect between women and men.

Among women who had ever been pregnant, 7% admitted to drinking alcohol during this period. This is a lower indication than in previous PARPA surveys (16% in 2005, 12% in 2008).



Only 35% of respondents said that the doctor had raised the topic of harmful effects of drinking in pregnancy with them, 41% indicated that this topic had not come up, and a quarter did not remember whether this issue had been discussed with the doctor. The age of the respondents mattered: 90% of women aged 18–34 who had ever been pregnant said that their doctor had advised them against drinking alcohol in pregnancy, compared to only 35% of respondents over 65, which may indicate that there is an increasing commitment by doctors to educate patients about the harmful effects of alcohol on the foetus (PARPA, 2021).

A 2017 survey by the Chief Sanitary Inspectorate (GIS) also analysed mothers' awareness of the harmfulness of drinking alcohol – 98% of respondents stated that there is a major health risk for the child if the mother consumes significant amounts of alcohol during pregnancy, but only three quarters were aware of the high risk in case of small amounts. A very small number of women said that consuming small or significant amounts of alcohol during pregnancy posed no risk (1% and 0.4% respectively; GIS, 2017).

Smoking

Children of women who smoke are generally characterised by lower birth weight and more frequent respiratory diseases. At school age, children of mothers who smoked during pregnancy are shorter and perform less well. Smoking during pregnancy also increases the likelihood of addiction to tobacco in the child's later life. E-cigarettes are not recommended either. Research shows that in 2017 5.9% of women admitted to have actively smoked during pregnancy. The trend is slowly declining, with the rate exceeding 7% in 2013 (GIS, 2017).

During pregnancy, the number of cigarettes smoked decreases, although pregnant smokers still smoke an average of 4 cigarettes per day in the first trimester. However, this indication is also lower than in 2013.

The mother's passive smoking is also harmful to the developing foetus. Nearly 18% of pregnant respondents say they are exposed to inhaling cigarette smoke

Table 4. Number of cigarettes smoked by women just before, during and immediately after pregnancy in 2013 and 2017

Average number of cigarettes smoked daily	Average in 2013	Average in 2017
Anytime earlier than 3 months before pregnancy	11.17	9.77
In 3 last months before pregnancy	9.47	8.77
In first months of last pregnancy	4.48	4.00
In final 3 months of last pregnancy	2.68	2.23
Currently	1.30	1.21

Source: GIS, 2017.

every day at home, and nearly 10% at work. Both rates are lower than in 2013.

Medicines and psychoactive substances

Drug use by a pregnant woman can cause various foetal malformations, as well as pregnancy complications such as preterm birth, miscarriage or foetal death. It also contributes to low birth weight and behaviour disorders in the child.

In 2017 only 1.64% of pregnant women declared taking sedatives or sleeping pills in 2017 (down from 2.2% in 2013), 0.72% of women admitted to using over-the-counter drugs, 0.77% to using prescription drugs with the knowledge of a doctor and only 0.1% of women used prescription drugs without the knowledge of a doctor. Only 0.2% of the respondents admit to using other psychoactive substances during pregnancy and 3 months before pregnancy. The most common substances were hashish and cannabis.

Almost all respondents (99%) were aware that the use of drugs and other intoxicants is very risky for the health and life of the foetus and the mother.

Vertical transmission of HIV

Human immunodeficiency virus (HIV) can be transmitted from mother to child during pregnancy, birth or breastfeeding. The risk of mother-to-child HIV transmission is

15–30%. With breastfeeding for more than 6 months or mixed feeding, it increases to about 50%. Between 2010 and 2019, about 224 vertical HIV infections (mother-to-child; WHO, 2020) were registered in Poland. They account for about 90% of all diagnosed infections in the group under 18 years of age (Krajowe Centrum ds. AIDS, 2021). In 2019, five such cases were registered (Krajowe Centrum ds. AIDS, 2021). It should be noted that HIV infection has a much faster course in a child and is associated with a higher risk of developing AIDS and death compared to adults. Up to 10% of untreated children are at risk of dying within the first year. In the absence of any medical intervention, the risk of mother-to-child transmission is 15–45%, whereas the introduction of medical intervention, with particular attention to treatment of the mother, reduces the risk to less than 1–2% (Kowalska, 2016). In order to start treatment, HIV testing is essential. In Poland, HIV testing is recommended for all pregnant women up to 10 weeks of pregnancy and between 33 and 37 weeks of pregnancy. Unfortunately, this test is only performed in about 30–33% of pregnant women in our country. As a consequence, the risk of vertical HIV transmission in Poland is about 20%, while in western EU countries and the United States it is around 1% (RPO, 2019). The reason for the low number of tests performed is the insufficient awareness of pregnant women, the fear of being tested, the lack of education in this area, but also the failure of doctors to refer pregnant women for this type of test. More than 80 per cent of the surveyed entities having a contract with the National Health Fund admit that they do not fully implement the HIV vertical transmission prevention programme (RPO, 2019).

### Foetal alcohol syndrome

Alcohol used by the mother during pregnancy can become a cause of serious damage to the child's body while still in foetal development. As already mentioned, alcohol consumption can cause preterm birth, miscarriages and foetal defects, including mental and physical disorders in the child's body known as FASD.

The term includes:

- FAS (code Q86.0 in ICD-10),
- partial FAS,
- alcohol related neurodevelopmental disorder, ARDN.

Common to all FASD diagnoses is abnormal development of the central nervous system (CNS). Damage to the CNS may be accompanied by other impairments, e.g. of the heart, skeletal system, urinary system, hearing and vision.

Foetal alcohol syndrome is the most prominent and most commonly diagnosed disorder of the FASD group. It is characterised by the co-occurrence of three elements that do not occur together in any other disease:

1. Foetal or later growth retardation
2. Characteristic dysmorphic facial changes
3. Abnormal development of the CNS.

There are no systematic studies or statistics to determine the FASD prevalence. However, it is estimated that full FAS occurs in four cases per 1,000 people, and any of the FASD disorders in at least 20 cases per 1,000 people. In Europe, FASD is estimated to be the most common non-genetic neurodevelopmental disorder, affecting approximately 1% of all live births.

It is important to diagnose FASD as early as possible (right after birth or in the first years of life), which increases the chance of introducing effective therapy so that the person with the condition can function as independently as possible. Therefore, PARPA, together with a group of experts, has developed recommendations for the diagnosis of foetal alcohol spectrum disorders (PARPA, 2020).

### Perinatal health

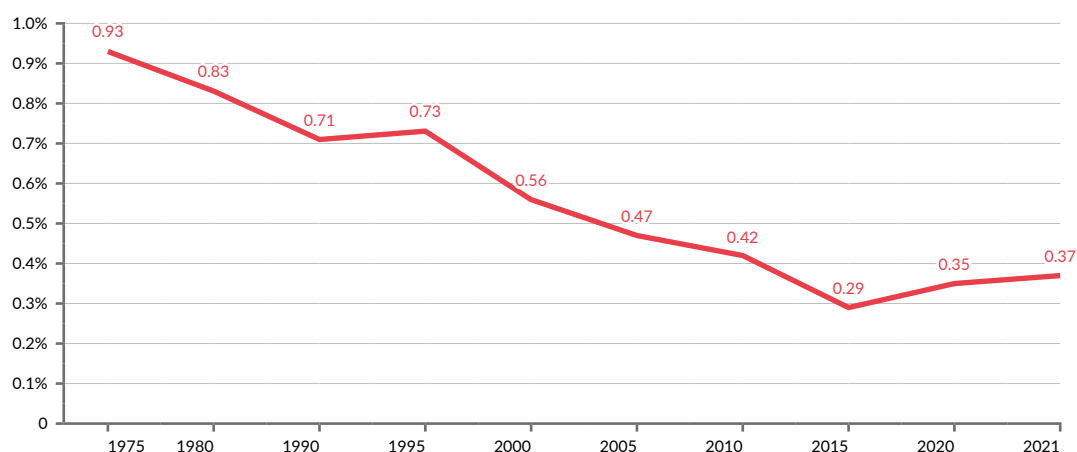
With regard to perinatal care, the WHO has developed a group of core and recommended indicators, the monitoring of which will make it possible to analyse the health situation of the youngest population. In Poland, indicators from the core group are monitored in their entirety. They include:

- foetal death rate,
- neonate mortality rate,
- infant mortality rate,
- birth structure by birth weight,
- birth structure by duration of pregnancy,
- death rate of women during pregnancy, childbirth and the postpartum period,
- multiple births,
- birth structure by age of the mother,
- birth structure by birth order,
- birth structure by mode of pregnancy termination.

This section will only discuss selected indicators from the above list, which have the greatest impact on the health and life of the child and are not discussed elsewhere in the report.

In Poland, the percentage of stillbirths has been declining for years. In 2020, they accounted for 0.37% of all births and were equally frequent in rural and urban areas (Figure 3).

Figure 3. Percentage of stillbirths in Poland between 1975 and 2015



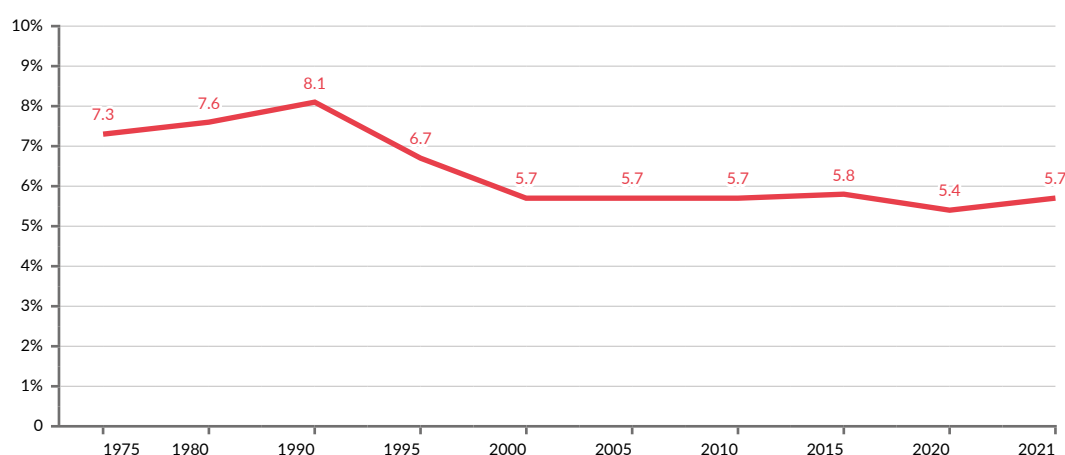
Source: Wojtyniak, Goryński, 2016; demografia.stat.gov.pl (data up to 2015).

The rate of infant deaths (up to 1 year of age) is also decreasing, which is further discussed in a subsequent section on *Child and Adolescent Mortality*.

In 2021 5.7 per cent of live births were so-called low birth weight births, i.e. neonates whose weight at birth was less than 2,500 g. Although this rate has remained almost at the same level for several years, it is still slightly lower than the average for EU countries, which the WHO estimates at 6.1% (higher rates than Poland are recorded by, among others,

Bulgaria – 9.5%, Greece – 9.4%, Portugal – 8.9%, Hungary – 7.8%, Spain – 7.5% and Austria – 6.1%).

**Figure 4.** Percentage of neonates with birth weight below 2,500 g (live births) from 1975 to 2021



Source: Wojtyniak, Goryński, 2020; GUS.

Preterm babies are considered to be those born before 37 weeks of gestation, while births before 28 weeks of gestation are considered extremely preterm. According to the Statistics Poland (GUS), in 2021, 24,523 babies were born before 37 weeks of gestation, accounting for 7.37% of all births, while extremely premature babies accounted for 1,369, or 0.41% of all births. Over recent years, the rate of preterm births has been increasing slightly, from 6.49% in 2002 to 7.37% in 2021.

Worldwide, preterm births are the most common cause of perinatal neonate morbidity and mortality. Approximately 30% of babies born prematurely are diagnosed with additional health problems, necessitating intensive and prolonged medical care and a variety of specialist interventions. Among neonates weighing less than 1,500 g, there is a 200-fold greater risk of death before 1 year of age compared to neonates weighing more than 2,500 g (Mazowiecki Urząd Wojewódzki, 2014). In addition, preterm birth is correlated with a higher risk of abuse, which may result both from deterioration of the parent-child relationship due to stress or prolonged medical care and overprotection (Walczak-Kozłowska and Chrzan-Dętkoś, 2019).

Risk factors for preterm birth include:

- low socio-economic status,
- the woman's age below 18 years or over 40 years;
- low pre-pregnancy body weight;
- multifoetal gestation;
- history of preterm birth;

- history of spontaneous or induced miscarriage;
- sexually transmitted diseases;
- high-risk pregnancy due to maternal diseases (e.g. diabetes, epilepsy);
- hypertension, kidney disease, heart defects;
- smoking, alcohol or drug use;
- inadequate prenatal care.

**Breastfeeding**

Exclusive breastfeeding until at least 6 months of age is considered the gold standard for infant feeding, promoted by all scientific societies and authorities in the fields of health, paediatrics and nutrition, including the American Academy of Paediatrics, the WHO and the EU Public Health Directorate. Breastfeeding up to the age of 2 years is also recommended, if the mother and child want it. It is emphasised that breastfeeding has numerous short- and long-term benefits for the child, including the provision of all active substances necessary for normal development, ensuring normal weight at 6 months of age, no growth deficits, a lower risk of being overweight at a later age and a reduced risk of type 1 and type 2 diabetes. Breastfeeding is also an element that strengthens the mother’s competence and is a factor that protects the child from abuse (Baranowska, 2016).

However, this standard is not implemented in Poland. Data made available by the e-Health Centre show that in 2020, only 74% of children aged 1–4 weeks were exclusively breastfed. This percentage decreased with the age of the child.

**Table 5.** Percentages of children by feeding method

Feeding method	1–4 weeks	2–6 months	9 months	12 months
Exclusive breastfeeding	74%	56%	27%	14%
Mixed feeding	16%	24%	32%	24%
Formula feeding	10%	20%	41%	62%

Data made available by the e-Health Centre (Centrum e-Zdrowie).

The reasons are attributed to an insufficient system of substantive and practical support for breastfeeding women. The 2018 report *Is Poland friendly to a breastfeeding mother and her child* shows that only 43% of the women surveyed who gave birth by vaginal delivery, and only a quarter of those who had a caesarean section, were helped to breastfeed their child immediately after birth, despite the standard of perinatal care stating that such instruction should be provided. Only 38% of women were offered advice

”  
*I’m waiting for my test results and I’m very worried. I had cancer before, but I have already recovered. I’m afraid it might come back. I often worry that something bad could happen, although I know that such worrying is pointless. I have to wait for the things to clear up.*

*16-year-old boy  
A quote from phone calls and emails to 116 111 Helpline for Children and Young People*



from a lactation consultant during their hospital stay after giving birth, and 57% of women said that their babies were fed formula during their hospital stay (Centrum Nauki o Laktacji, 2018).

**Table 6.** Number of deaths due to sudden infant death syndrome in Poland between 2011 and 2020

Year	Boys	Girls	Total
2011	28	29	57
2012	30	21	51
2013	21	20	41
2014	28	14	42
2015	21	18	39
2016	26	18	44
2017	2	4	6
2018	16	15	31
2019	13	10	23
2020	5	10	15

Source: Eurostat, GUS, 2021.

### Sudden infant death syndrome

Sudden infant death syndrome (SIDS), otherwise known as cot death, is the sudden death of an infant under one year of age that is not explained by an autopsy, examination of the death scene or analysis of the clinical history. In Poland, several dozen such cases are registered annually. In 2020 SIDS was the cause of death of 15 children (Table 6).

The aetiology of SIDS is not fully understood. It is considered to be caused by environmental and genetic factors. Environmental factors include smoking and drinking alcohol during pregnancy (particularly in the first trimester), neglect of prenatal care, preterm birth and low birth weight, exposure of the infant to cigarette smoke, too soft mattress in the infant's bed, the infant getting cold or overheated, and sleeping in the same bed with the infant. Other risk factors for SIDS are associated with single motherhood, difficult financial situation, complications of pregnancy and childbirth, pregnancies in quick succession or multiple pregnancies, placing the infant to sleep on the stomach, health complications in the infant and an Apgar score of 5 points or less for the neonate. The most important aspect of the preventive management of SIDS is the identification of risk factors and the education of parents on preventive measures.

### Shaken baby syndrome

Shaken baby syndrome (SBS) is the term used to describe the symptoms produced by violently shaking an infant or hitting an infant or a toddler on the head. The amount of damage to the brain caused by this behaviour depends on the intensity and duration of the shaking, as well as the force of the blows. Symptoms range from minor (irritability, drowsiness, tremors, vomiting) to very severe (epileptic seizures, coma, stupor, death). These neurological changes are the result of damage to brain cells caused by brain injury, hypoxia or swelling. Extensive haemorrhages in the retina of one or both eyes are also common. The classic triad of symptoms (subdural haematoma, cerebral oedema and retinal haemorrhage) is in some cases accompanied by bruising occurring in those parts of the body which were held during shaking. Fractures of long bones or ribs may also occur as a result.

In most cases, SBS is diagnosed in children between 5 and 9 months of age. The high susceptibility of the neonatal brain to injury is due to several factors, including the disproportionately large head of the neonate, the relatively weak cervical muscles, the open fontanel, the extensive subarachnoid space and the high water content of the brain structures.

The above factors particularly predispose infants to serious injuries when they are grasped by the trunk or arms and shaken.

According to NIZP-PZH data, 3,147 children under the age of one were admitted to hospitals in 2020 due to head injuries, including 167 with intracranial injury or brain injury.

Available statistics, collected according to the current ICD-10 classification, classify SBS (if caused by deliberate parental action) as a group of so-called child maltreatment syndromes (T74). According to PZH, there were 25 diagnoses of T74 in 2020, but this certainly does not reflect the full scale of the problem. In Poland, the rule of dual coding applies. The code indicating the essence of the injury is given first, and the one indicating the cause of the injury is given second. Some health care providers do not comply with the obligation to indicate the cause of the injury.

### Munchausen syndrome by proxy

Factitious disorder imposed on another (Munchausen syndrome by proxy) involves parents deliberately inducing symptoms of the disease in their child. These symptoms are usually chronic or recurrent and, in addition, the parents provide doctors with false information about their child's previous course of illness. The syndrome is most commonly diagnosed in children under six years of age. Among the symptoms induced, the most common are ataxia and pathological drowsiness due to high doses of barbiturates administered to children, persistent vomiting due to mechanical provocation, hypoglycaemia after insulin administration and infections caused by the injection of contaminated substances. According to statistics, in 95–98% of cases of factitious disorder imposed on another, the perpetrator is the biological mother. Mothers with perinatal complications, experience of childhood abuse, psychiatric disorders and those involved in the medical professions are at increased risk (Yates and Bass, 2020). The prevalence of this syndrome is unknown. Epidemiological reports mainly include severe cases. It is estimated that several to a dozen cases per year are described in Poland, but it appears that the prevalence of the disorder may be underestimated. By comparison, approximately 1,200 cases of the disorder are detected annually in the United States (Berent et al., 2010).

### Main reasons for hospitalisation of children and adolescents in Poland

The most common reason for hospitalisation of children and adolescents are selected conditions originating in the perinatal period (e.g. related to congenital diseases, complications during birth, factors related to the mother, etc.). Injuries, poisoning and other effects of external factors come second. In 2020, a total of more than 146,000 children and adolescents required hospital care for these reasons. This is all the more worrying as this group most often includes injuries and other conditions caused by violence or neglect, especially among the youngest children (Table 7).

**Table 7.** Main reasons for hospitalisation of children and adolescents in 2020

No.	Condition	ICD-10 code	<1 year	1–4 yrs	5–14 yrs	15–19 yrs	Total 0–19 yrs
1.	Certain conditions originating in the perinatal period	P00–P96	157,116	36	0	0	157,152
2.	Injury, poisoning and other consequences of external factors	S00–T98	5,294	32,348	75,128	33,693	146,468
of which	intracranial injury	S06	167	957	2,301	1,231	4,656
	other injuries of the head	S00–S05, S07–S09	2,980	12,052	11,052	4,103	30,187
	burns	T20–T32	454	2,857	823	301	4,435
	poisoning by drugs, medicaments and biological substances and the toxic effects of substances chiefly nonmedicinal as to source	T36–T65	358	2,553	1,951	3,710	8,572
	consequences of injuries, poisoning and other effects of external factors	T90–T98	7	213	2,863	1,617	4,700
3.	Diseases of the respiratory system	J00–J99	28,370	41,730	39,972	6,270	116,342
4.	Certain infectious and parasitic diseases	A00–B99	12,871	20,312	14,421	3,523	51,127
5.	Diseases of the digestive system	K00–K93	6,399	10,594	20,935	12,590	50,518

Source: NIZP–PZH, <http://www.statystyka.medstat.waw.pl>.

Extreme cases of child maltreatment and their consequences are classified in ICD-10 under the category T74 – child maltreatment syndromes. Unfortunately, as already mentioned, some health care providers do not assign a category based on the cause of the injury, but only based on the nature of the injury, hence these data are certainly incomplete. At the same time, it should be noted that if a diagnosis of T74 is ever made, it most often concerns the youngest children – under 4 years of age. (Table 8).

**Table 8.** Diagnosed T74 child maltreatment syndromes according to the ICD-10 international classification of diseases and related health problems

Year	Girls	Boys	Total
2016	12	9	21
2017	20	13	33
2018	20	12	32
2019	18	11	29
2020	17	8	25

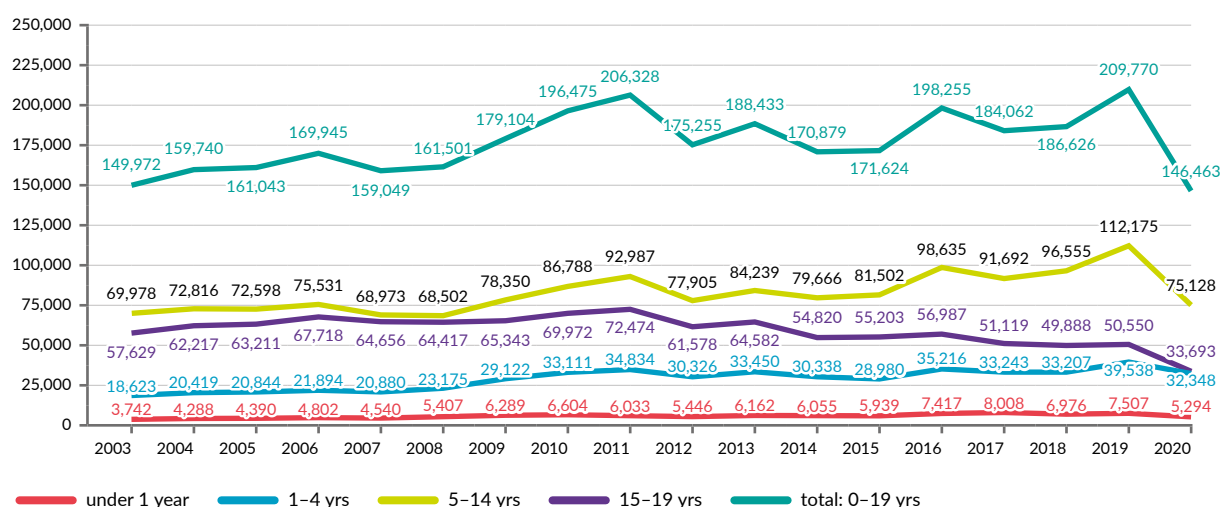
Source: NIZP–PZH.

### Child safety: accidents and injuries

Based on the analysis of data from the last several years, it can be seen that every year 150,000 to 200,000 children require hospital care for injuries, poisonings and other conditions caused by external factors, and within this group, the proportion of both the youngest children, under 1 year of age, and children under 5 years of age increased between 2003 and 2020 (from 2.4% to 3.6% and

from 14.9% to 22.3%, respectively). The marked decrease in hospitalisations due to injuries in 2020 compared to 2019 may be related to the COVID-19 pandemic and the lower activity of children, who studied remotely for a significant part of the year and were not allowed to move around in public spaces without adult caregivers for several weeks of the first lockdown (March-April 2020) (Figure 5).

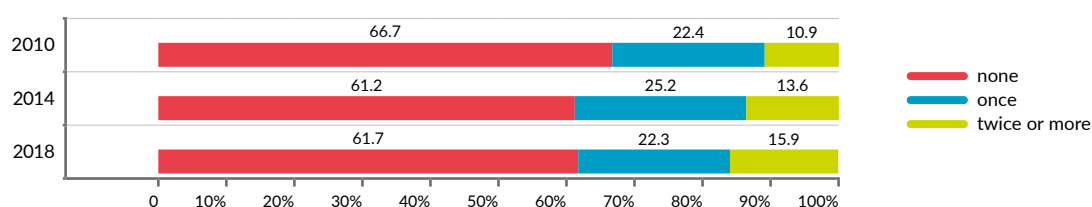
**Figure 5.** Number of hospital admissions for external cause injuries by age, 2003–2020



Source: Own analysis based on data of the NIZP-PZH (<http://www.statystyka.medstat.waw.pl>).

The most recent Polish HBSC (Health Behaviour in School-aged Children) survey of 2018 showed that 38.2% of adolescents, i.e. one in three of the students surveyed, had suffered at least one injury requiring medical attention in the past 12 months, and 15.9% had suffered repeated injuries. Compared to previous editions of the HBSC survey, the latter indicator is clearly increasing (Figure 6; Mazur and Małkowska-Szcutnik, 2018).

**Figure 6.** Prevalence of injuries requiring medical attention in children aged 11–15 years in Poland in 2010, 2014 and 2018



Source: HBSC survey of 2014 and 2018.

#### Accidents in educational institutions

School is one of the most important environments in the lives of children and adolescents. More than 5 million students attend it. The Ministry of National Education (MEN) collects information on accidents in educational institutions as part of the Educational Information System (SIO). In the 2019/2020

school year, there were 22,509 accidents. This is significantly less than in previous years – for example, in the 2017/2018 school year there were 54,459 such accidents. Probably the reason for the reduction in accidents was the lockdown related to the COVID-19 pandemic and the shift to distance learning. In 2020, the main causes of accidents were student's inattention and unintentional acts by the student or other persons (Table 9).

**Table 9.** Causes of accidents in the 2017/2018 and 2019/2020 school years

Accident cause	Number of accidents	
	2017/2018 school year	2019/2020 school year
student's inattention	35,120	12,080
other causes	10,465	4,004
unintentional acts by the student	–	2,779
unintentional acts by other persons	–	1,546
unintentional hit	7,806	1,346
intentional acts by other persons	–	331
intentional acts by the student	–	179
battery, intentional hit	740	160
ignorance of or noncompliance with health and safety rules	138	26
poor health or incapacity to attend classes	77	–
no or insufficient supervision of the student	45	10
poor technical condition of facilities	28	16
poor technical condition of equipment, appliances	8	13
improper use of machinery and equipment	12	9
inadequate safeguarding of machinery and equipment	7	6
inadequate safeguarding of chemical substances and preparations	–	2
inadequate security of staircases and corridors	5	–
poor technical condition of machinery and equipment	5	1
conduct of activities not in line with the curriculum	3	1

Source: dane.gov.pl.

## Anti-health behaviours

### Poor nutrition

Poor eating habits, resulting in overweight and obesity, are a serious health problem. The results of successive editions of the HBSC survey indicate that the situation is worrying and the trend shows no consistent improvement. In 2018, depending on gender and age group, obesity and overweight affected between 5.5% (girls aged 15–16) and 21.5% of the population (boys aged 13–14; Figure 7).



Figure 7. Prevalence of obesity and overweight among schoolchildren in 2006–2018 in Poland based on HBSC data



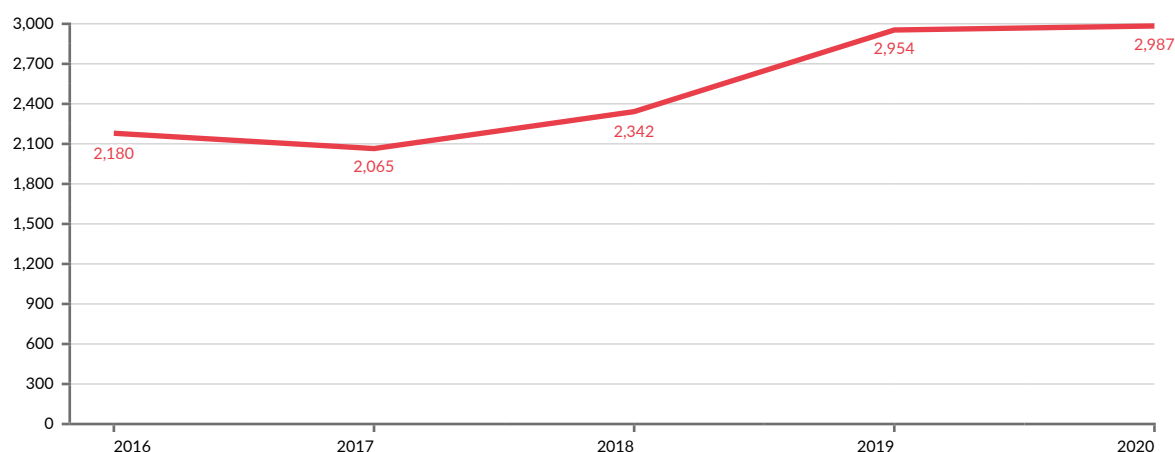
Source: Wojtyniak and Goryński, 2020.

Parents play an important role in reducing overweight and obesity in children and adolescents. However, research shows that a significant proportion of parents incorrectly assess their children's weight and height proportions (Czajka and Kołodziej, 2015). This is of concern as the prevalence of overweight and obesity in children is a strong predictor of the persistence of these problems into adulthood.

Furthermore, only 50% of 11–15 year olds with a normal body mass index (BMI) consider their body weight to be normal (46% of girls and 56% of boys). Fourteen per cent of those with a normal BMI consider themselves too thin (6% and 23% respectively) and 36% consider themselves fat (48% and 21% respectively). The perception of one's own weight as being excessive can become a source of various psycho-physical problems, uncontrolled use of different diets, as well as emotional problems and disturbed functioning in the peer group. In 2018, one in five teenagers (21%) were on a diet. Girls engage in such activities significantly more often than boys (25% vs. 16%; Mazur and Małkowska-Szkutnik, 2018).

Uncontrolled use of different diets can lead to the development of eating disorders. According to data obtained from the Institute of Psychiatry and Neurology, 2,987 children and adolescents up to 18 years of age were treated for them in Poland in 2020. (Figure 8).

**Figure 8.** Number of children treated on an outpatient basis for eating disorders



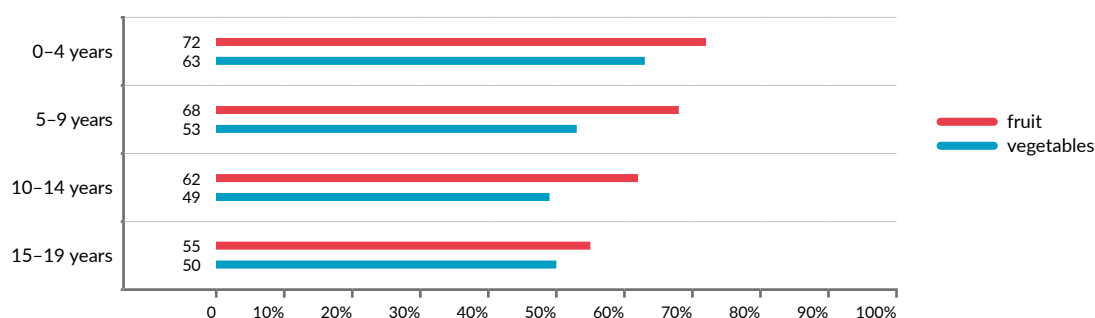
Source: Data made available by the Institute of Psychiatry and Neurology.

### Consumption of fruit and vegetables

According to WHO recommendations, fruit and vegetables should be the basis of the diet, which should make up at least half of the meals consumed during the day (Jarosz, 2016).

According to a survey by the Statistics Poland (GUS), in 2019 72% of children aged 0.5–4 years ate fruit at least once a day, and 63% ate vegetables (not including potatoes). The frequency of their consumption clearly decreased with age. All children ate fruit more often than vegetables (Figure 9).

**Figure 9.** Percentage of children eating fruit and vegetables at least once a day in 2019 (by age)



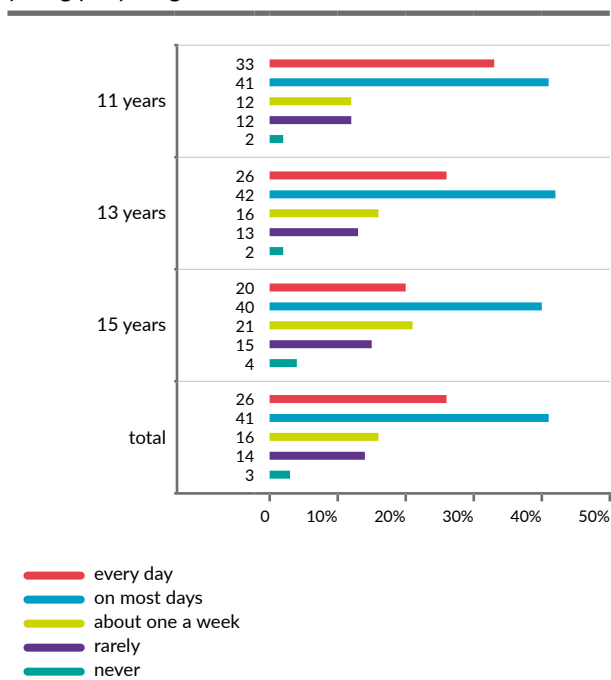
Source: GUS, 2021.

A less favourable picture is presented by the 2018 HBSC survey, which showed that only 38% of 11–15 year old students eat fruit and 34% eat vegetables on a daily basis, with girls eating better. Such a large discrepancy in the results of the two surveys is at least partially related to methodological differences – in the GUS survey, the questionnaires about children were

completed by parents, in the HBSC survey it was done by the students themselves.

The decreasing consumption of fruit and vegetables with age may indicate that children's and adolescents' eating habits have not been properly formed. The primary environment for the formation of proper eating habits in children is the family. Family meals are one of the foundations of children and adolescents' eating behaviours. They enable, among other things, the modelling of favourable patterns of appropriate diet. Studies show that around 16% of children aged 11–15 either never eat meals together with their parents or do so less often than once a week (Figure 10).

**Figure 10.** Frequency of eating meals with parents by young people aged 11–15 in 2018



Source: Mazur and Małkowska-Szcutnik, 2018.

It should be noted here that the regularity of eating breakfast and dinner with parents decreases with age and is lower in girls than in boys, and positive family patterns are more often observed in affluent families.

### Physical activity

Physical activity is one of the most important factors for maintaining both physical and mental health.

The recommended frequency of intensive physical activity for children and adolescents is, according to the WHO, at least three times a week.

Survey results from both the EHIS (European Health Interview Survey) and HBSC show that the proportion of children and adolescents undertaking physical activity is increasing. According to the 2019 EHIS survey, 98% of students aged 6–14 take part in compulsory physical education classes, and although only 51% of them (55% of boys and 47% of girls) take up regular sport or recreational activities outside of lessons, this is still an increase of 2 percentage points compared to 2014 and of 15 percentage points compared to 2009. At the same time, however, 14% of students (12% of boys and 15% of girls) do not participate in any form of physical activity outside lessons, which is also an increase comparing with 2014, when 10% of children and adolescents did not engage in any physical activity outside school (GUS, 2021).

Similar conclusions are drawn from the latest 2018 HBSC survey. It showed that 33% of students (38% of boys and 28% of girls) maintain the level of physical activity recommended by the WHO in order to correctly develop and stay healthy. Physical activity of adolescents decreases with age and at the same time gender differences become more prominent, with only 22% of girls aged 15–16 maintaining the recommended level of activity (Mazur and Małkowska-Szcutnik, 2018). This means that the health of more than three quarters of young people in Poland is at risk due to insufficient physical activity.

In addition, these unfavourable trends were exacerbated by the COVID-19 pandemic. According to a Kantar study carried out as part of the Polish Athletic Association's programme, the average daily time spent by children and adolescents on physical activity decreased by more than a third – from 84 minutes before the pandemic to 53 minutes during the pandemic (study carried out in September 2020; PZLA, 2021). For more on the situation of children in the pandemic, see chapter: Children and Adolescents' Experiences of COVID-19 Pandemics.

At the same time, analyses show that there is a slight increase in the number of children and adolescents who spend 2 or more hours a day on sedentary activities: watching films, playing computer games, checking their smartphone, etc. (Table 10).

**Table 10.** Percentage of adolescents aged 11–15 in Poland spending more than 2 hours a day motionless in front of a screen, 2014–2018

	2014	2018
<b>Watching films or other shows</b>		
school days	60%	61%
weekends	80%	83%
<b>Playing computer or other devices</b>		
school days	34%	34%
weekends	53%	56%
<b>Using computer, tablet or smartphone for other purposes</b>		
school days	55%	56%
weekends	67%	66%

Source: Mazur and Małkowska-Szcutnik, 2018.

At the same time, the percentage of children and young people who devote 6 or more hours during school days to sedentary activities is: 5% – watching films or other shows, 3% – playing computer games and 18% – using screen devices for other purposes. At weekends, these percentages are even higher: 16%, 12% and 19%, respectively (Mazur and Małkowska-Szcutnik, 2018).

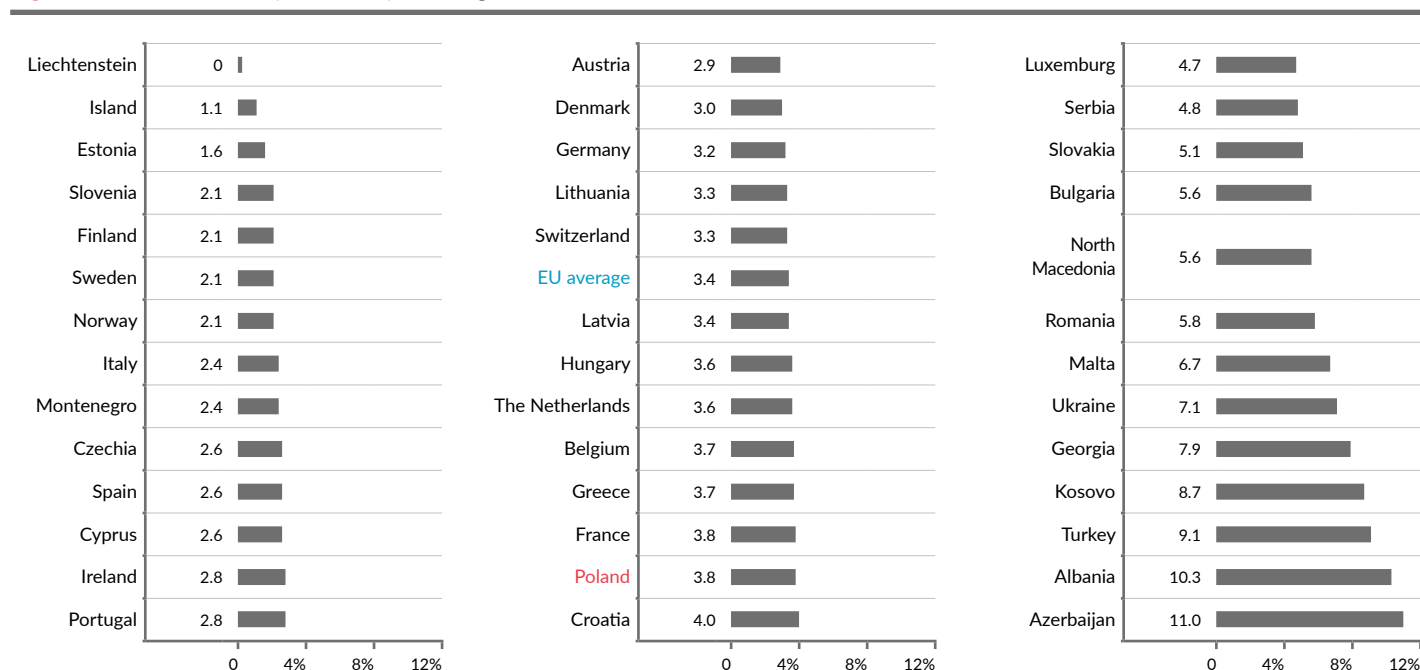
### Child and adolescent mortality

Mortality of infants (children under 1 year of age) has been decreasing in Poland for many years. According to the Statistics Poland (GUS), 1,306 infants died in 2021, i.e. nearly 3.9 per 1,000 live births. For comparison, in 2002, the rate was 7.5.

Although the infant mortality rate is gradually decreasing in Poland, it is still higher than the average for EU countries, which was 3.4 in 2019 (Figure 11).

Low birth weight is one of the main risk factors for infant mortality. Although infants with low birth weight, according to the Statistics Poland (GUS), in 2021 constituted only 5.7% of all live births in Poland, they accounted for as many as 68% of deaths in infancy.

**Figure 11.** Infant mortality (under 1 year of age) in 2019



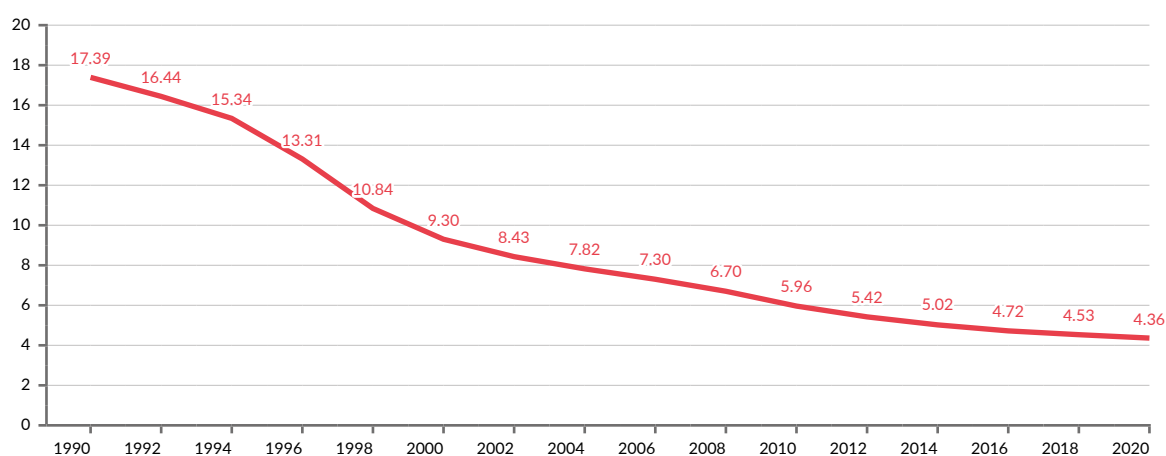
Source: Eurostat.

In 2020, half of infant deaths were due to conditions originating in the perinatal period and 40% to congenital malformations. The main cause of infant deaths arising in the perinatal period are disorders associated with shortened gestation and low birth weight.

The mortality rate of children under 5 years of age is also decreasing in Poland. (Figure 12).

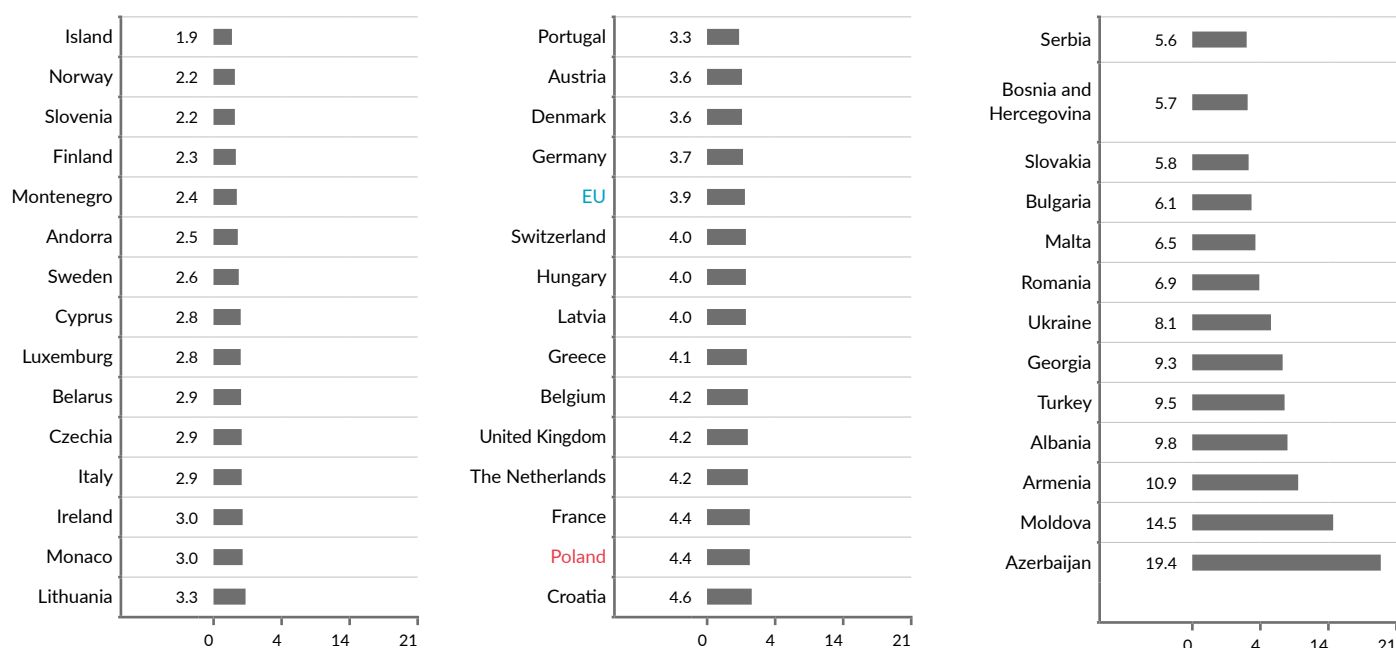
Despite this favourable trend, Poland still lags behind most European countries (Figure 13).

**Figure 12.** Mortality rate of children under 5 years of age per 1,000 live births in Poland 1990–2020



Source: UNICEF ([www.childmortalityrate.org](http://www.childmortalityrate.org)).

**Figure 13.** Mortality of children under 5 years of age (per 1,000 live births) in 2020



Source: [data.worldbank.org](http://data.worldbank.org).



While, as already mentioned, in the group of children under 1 year of age the main causes of death are various conditions originating in the perinatal period and congenital malformations, in the older age groups the share of external causes (including mainly accidents and suicide) is increasing, being the predominant cause of death in the 10–19 age group. This is worrying, as these very causes are preventable (Table 11).

**Table 11.** Share of deaths due to main causes in the total number of deaths by age group of the deceased in Poland in 2020

under 1 year		1–4 years		5–9 years		10–14 years		15–19 years	
P	50%	Q	35%	C	30%	VY	45%	VY	69%
Q	40%	C	17%	VY	20%	C	18%	C	7%
VY	2%	VY	16%	Q	19%	Q	9%	J	5%
J	2%	J	9%	G	10%	J	8%	G	4%

C neoplasms (C00.0–D48.9)

G diseases of the nervous system (G00.0–G98)

J diseases of the respiratory system (J00.0–J99.8)

P certain conditions originating in the perinatal period (P00.0–P96.9)

Q congenital malformations, deformations and chromosomal abnormalities (Q00.0–Q99.9)

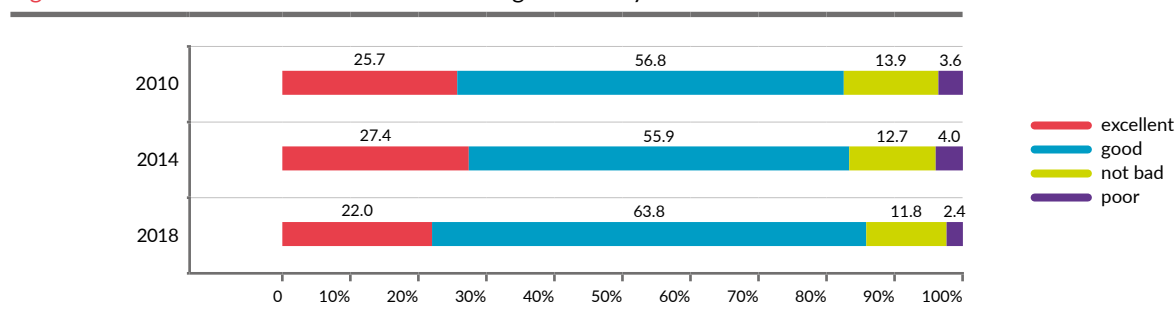
VY external causes of morbidity and mortality (V01.0–Y89.9)

Source: Own analysis based on data of the Statistics Poland, GUS (demografia.stat.gov.pl).

## Child and adolescent health assessment

According to data from the most recent HBSC survey, two-thirds of children and adolescents aged 11–15 rated their health as good or excellent. An extremely negative assessment (poor health) was rare (2.4% of indications). However, the magnitude of poor health may be underestimated because respondents completed the questionnaires in school premises during school hours, which eliminated those permanently or periodically not attending school due to more serious health problems (Figure 14).

**Figure 14.** Self-assessed health of adolescents aged 11–15 years between 2010 and 2018

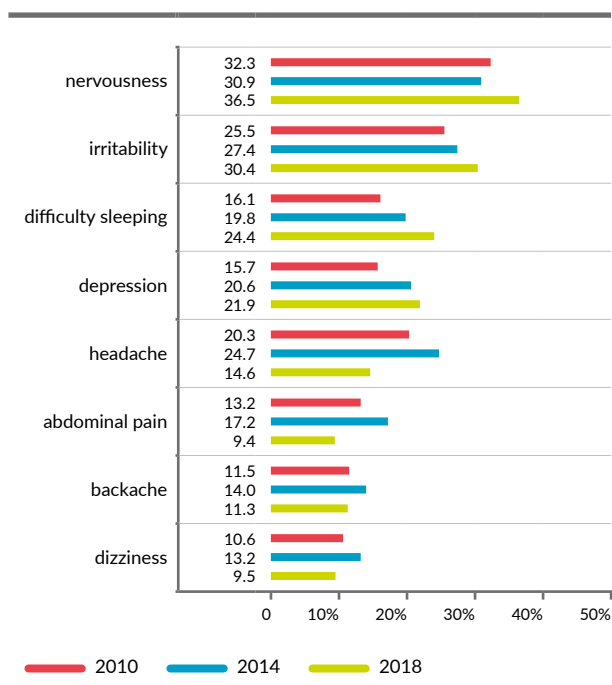


Source: Mazur and Małkowska-Szcutnik, 2018.

In addition, self-assessment of health deteriorates with age and is significantly worse in girls.

Compared to the results of the 2010 HBSC survey, the one of 2018 showed an increase in the severity of all subjective psychological problems experienced and a decrease in the severity of all somatic ailments surveyed (Figure 15).

**Figure 15.** Frequency of recurrent subjective problems experienced by adolescents aged 11–15 years between 2010 and 2018



Source: Mazur and Małkowska-Szkućnik, 2018.

Nearly 42% of adolescents frequently experience two or more ailments of psychological or somatic origin, including more girls than boys (49% vs 34%) and more older adolescents compared with younger adolescents (50% of 15-year-olds vs 32% of 11-year-olds).

There were also no significant differences in parents' ratings of their children's health comparing with the 2019 EHIS survey. The vast majority rated their children's health as good or very good (ranging from 92.9% of indications for 15–19 year olds to 95% of indications for 5–9 year olds). Only about 0.9–1.6% of respondents rated children's health as bad or very bad in 2019 (GUS, 2021).

## Summary

Despite the legislator's guarantee of special health protection for children and adolescents, not all provisions of the law are fully implemented. As in the previous edition of the *Children Count* report of 2017, the incomplete implementation of health services for the youngest children in the form of patronage visits or well-child check-ups is of concern. This is an important aspect of health care insofar as a patronage visit or a doctor's appointment are often the only opportunities for a professional from outside the family to see the child, assess the child's health and relationship with caregivers. Neglect in this respect represents a missed opportunity to protect children, not only in terms of medical aspects, but also in the context of potential abuse.

Another worrying trend is the declining immunisation rate of children, which represents a population-wide risk of diseases that seemed to have gone away, and barriers to accessing specialists and specialised tests. In addition, unfavourable phenomenon of major concern is the persistently high number of accidents and injuries in children and adolescents resulting in hospitalisation, but also death.

On the other hand, an undoubtedly positive trend is the steadily decreasing, although still higher than the EU average, child mortality, including infant mortality, and the generally improving overall assessment of the health status of children and adolescents.

In addition to the recent challenges described in this chapter, new ones are appearing. We are fresh from the COVID-19 pandemic, which may be associated with long-term population-wide health consequences that are not yet foreseeable. We are also faced with the need to provide proper care for the hundreds of thousands of children from Ukraine who are seeking refuge from war in our country. Hence, the area of health care should continue to be the subject of in-depth analyses and coordinated actions based on accurate data and scientific evidence, taking into account the perspective of both the medical community and, above all, of children and their parents, in order to be able to provide the highest possible quality of medical care and to respond quickly and effectively to developments that are detrimental to children's health and lives.

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## Online resources

- Baza Analiz Systemowych i Wdrożeńiowych – <https://basiw.mz.gov.pl>
- Baza Demografia – <https://demografia.stat.gov.pl/>
- Eurostat – <http://ec.europa.eu/eurostat/data/database>
- Krajowe Centrum ds. AIDS – <https://aids.gov.pl/>
- Otwarte Dane – <http://www.dane.gov.pl>
- UN Inter-agency Group for Child Mortality Estimation – <https://childmortality.org/>
- World Bank Open Data – <https://data.worldbank.org/>
- Zakład Monitorowania i Analiz Stanu Zdrowia Ludności – <http://www.statystyka.medstat.waw.pl>

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