1. KEY FACTS

Selected aspects of the demographic and social situation

Poland's population has been declining since 2009, falling to 37,637,100 at the end of 2023, which represents 8.2% of the total population of the EU27 and ranks Poland fifth in the EU. In 2023, the natural increase in Poland was negative in both urban and rural areas.

Women account for more than half of the total population (51.7%). The predominance of women over men only becomes apparent in the 50–54 age group and increases rapidly in older age groups. For every 100 men aged 65 and over, there are 148 women, and in the elderly age group of 85 and over, for every 100 men, there are as many as 258 women.

Poland's population is younger on average than that of most European Union (EU27) countries, but according to Eurostat projections, this favourable difference for Poland will gradually disappear, and by the mid-2050s, both the median age and the percentage of people aged 65 and over will be significantly higher in Poland than the EU average.

The percentage of children born outside formal marriage is increasing, and currently, more than one in four children is born outside marriage. In Zachodniopomorskie and Lubuskie voivodships, this proportion exceeds 45%. Poland has a significantly lower proportion of births outside marriage than other European countries; only four EU countries have a lower percentage of such births than Poland.

There is a slight downward trend in the frequency of live births weighing 2,500 g, which occur less frequently than on average in EU countries.

Although the percentage of people with tertiary education has been growing significantly in Poland for a number of years, it is still lower among men aged 25–74 than in most EU countries. In contrast, the percentage of women with tertiary education exceeds the EU-27 average. The proportion of persons with the lowest level of education is significantly lower in Poland than the EU-27 average.

The risk of poverty or social exclusion is currently at a lower level in Poland than the EU-27 average. The most significant improvement after 2015 has been observed among children and young people under 18, while there has been no improvement among the oldest age group (65 and over). However, the percentage of people at risk of poverty in this group is lower than the EU average.

In 2023, there has been a significant increase in the extreme poverty rate in Poland. There is a clear predominance of extreme poverty among rural populations compared to urban populations, even those in small towns. The proportion of persons in households at risk of extreme poverty decreases sharply with the increase in the educational attainment of the head of household.

The total and long-term unemployment rates in Poland are among the lowest in the EU. The voivodships with the worst unemployment rates in recent years are Warmińsko-Mazurskie, Podkarpackie and Świętokrzyskie. The significantly limited opportunities for part-time work in Poland compared to the EU and OECD average, particularly among women, should be considered a disadvantage.

The housing conditions of Poles are, in some respects, worse than the EU average, and this is particularly noticeable in relation to overcrowding. In contrast, Poles are less likely than the EU population as a whole to live in poor-quality dwellings.

The latest Human Development Index (HDI) for 2024, at 0.881 ranks Poland 19th in the European Union and 36th globally.

The above overview of Poland's demographic and social situation shows that it is better than the EU-27 average in many respects. In those areas where the situation is less favourable, the gap is narrowing. Measures aimed at improving it and reducing the gap between Polish society and the more affluent societies of the EU in certain areas should also contribute to beneficial long-term changes in the health of the Polish population.

Life expectancy and mortality of the Polish population

An analysis of data on life expectancy and mortality of the Polish population in 2023 shows that after years of the COVID-19 pandemic, which saw a significant deterioration in the health of Poles, the basic health indicators have largely returned to pre-pandemic levels and often even exceeded them.

In 2023, life expectancy for men was 74.7 years, 0.6 years longer than in 2019 before the pandemic, and for men aged 65, it was 0.1 years longer. Life expectancy

for women was 82.1 years, 0.3 years longer than in 2019 (at the age of 65, it was 0.1 years longer, similar to men).

For many years, Poland has been experiencing an unfavourable trend of high excess mortality among men compared to women, resulting in a significantly shorter life expectancy regardless of age. The authors of the chapter estimate that in 2023, slightly more than half (51.9%) of the difference in life expectancy between men and women, which was 7.3 years, was due to higher mortality among men under the age of 65.

The shortest life expectancy is among inhabitants of towns with a population of less than 10,000, while the longest life expectancy is among inhabitants of the largest cities with a population of over 200,000. The difference in life expectancy related to place of residence is greater for men than for women.

In all voivodships, life expectancy for men and women in 2023 was already higher than in 2019. The ranking of voivodships according to life expectancy before and after the pandemic has changed slightly for men, while it has remained virtually unchanged for women. The differences in life expectancy between voivodships for both men and women before the pandemic in 2019 and after the pandemic in 2023 are very similar.

The differences in life expectancy among inhabitants of powiats are only weakly related to their level of deprivation, especially in the case of women, which should be regarded as favourable.

There is a very clear correlation between life expectancy in Poland and the level of education. Individuals with lower levels of education live significantly shorter than those with tertiary education – this difference amounted to nearly 13 years for men aged 30 during the three-year period of 2020–2022, and nearly 9 years for women.

The life expectancy of Polish men and women is shorter than the EU-27 average by 4.1 and 1.9 years, respectively, and these differences are smaller than in 2019, when these gaps were 4.4 and 2.1 years, respectively. Polish men's shorter life expectancy is mainly due to their higher mortality rate during their working age (25–64 years) compared to other countries, while Polish women's shorter life expectancy is primarily due to higher mortality rates in older age groups (65 and over).

The decline in the overall mortality rate in Poland after 1991 slowed significantly in 2014–2019, and the pandemic years of 2020–2021 caused it to rise sharply by approximately a quarter. However, currently (2023), the death rate is already below that of the pre-pandemic year 2019.

In 2023, the overall population of Poland and persons aged over 45 most frequently died of heart disease, while suicide was the most common cause of death

among persons aged 15–24 and 25–44. The second leading cause of death in Poland in 2023 was cerebrovascular diseases, and the third was cancer of the trachea, bronchi and lungs.

The greatest potential years of life lost (PYLL75), premature mortality, are caused in men by diseases of the circulatory system (DCS) and malignant neoplasms (approx. 21% each), while malignant neoplasms are by far the most common cause of death in women (approx. 38%). In 2023, suicides were responsible for more potential years of life lost among men than lung cancer, cerebrovascular disease or myocardial infarction.

In 2023, diseases of the circulatory system were responsible for 36.9% of all deaths in Poland, which is less than in 2019 (39.4%). They pose almost 50% greater risk to men than women, and urban populations die on average one year younger than rural ones. The life expectancy of individuals with up to lower secondary education is more than two and a half times higher than that of individuals with tertiary education. Higher mortality from diseases of the circulatory system, especially heart disease, is the main factor contributing to shorter life expectancy in Poland compared to wealthier countries. The feasibility of detailed comparative analyses of mortality due to DCS is limited due to significant differences between voivodships and changes over time in the certification and coding of deaths, particularly in this group of causes.

Malignant neoplasms were responsible for 24.4% of all deaths in Poland in 2023, which is practically the same as in 2019 (24.5%). They pose a 70% greater threat to men than to women, and rural populations die on average only about six months younger than urban populations. The mortality rate associated with the level of education is much lower than in the case of DCS. The average female age at death due to malignant neoplasm of breast and malignant neoplasm of cervix uteri in 2023 was 70.8 years and 65.8 years, respectively, and thus women who died from the latter were, on average, 5 years younger. The mortality rate for women due to breast and cervical cancer was higher in urban areas than in rural areas.

Mortality from diseases of the respiratory system and diseases of the digestive system is currently higher than before the pandemic, with significant regional differences. Men die on average at a younger age than women, while the average age at death is similar in urban and rural areas. Education is a factor that strongly influences the risk of death from these diseases.

The level of education strongly differentiates the risk of death due to external causes and the likelihood of an ill-defined cause of death. A similar effect, but practically only for men, is found in urban or rural places of residence.

Although the infant mortality rate in Poland has been steadily declining for years, and until 2015, it was higher than the EU average, the decline slowed down after that year. In 2023, the infant mortality rate in Poland (3.9/1,000 live births) was higher than the EU average (3.3/1,000) by the same amount as in 2014. Of note is the higher early neonatal mortality, i.e. in the first week of life, in Poland than in most EU-27 countries. Infant mortality rates vary significantly between voivodships and fluctuate from year to year, which undoubtedly points to the need to improve and standardise the level of care provided to pregnant women and newborns.

The mortality rate of people under 75 due to avoidable and treatable or preventable causes is an essential element in assessing the performance of a healthcare system. The mortality risk among Polish citizens due to avoidable causes after the increase in 2020 and 2021 (higher for treatable causes) is currently lower than in 2019. The mortality rate from these causes is strongly linked to the level of education in both sexes. Mortality rates among men and women due to alcohol-related causes, i.e. preventable causes, increased between 2014 and 2022, but decreased significantly in both sexes in 2023.

The mortality rate and its dynamics due to avoidable causes in Poland are less favourable than the EU-27 average. In 2022, mortality due to preventable causes in Poland was 45% higher than the EU-27 average, mortality due to treatable causes was 56% higher, and avoidable mortality was 49% higher. For both preventable and treatable diseases, the situation in Poland is more unfavourable than in the EU as a whole for diseases of the circulatory system than for cancer. The mortality rate due to alcohol-related health problems for men in Poland in 2022 was more than twice (114%) higher than the mortality rate in the EU-27 as a whole, and the mortality rate for women was 89% higher.

Hospital morbidity in Poland

In 2023, Poland recorded 7.0 million hospitalisations, marking the first year in which the number exceeded the level registered prior to the COVID-19 pandemic. During the first year of the pandemic (2020), there was a sharp 25% decrease in hospitalisations, followed by smaller reductions of 12% in 2021 and 3% in 2022 compared to 2019.

A similar trend is observed in the standardised hospitalisation rates, which reflect the burden of disease after eliminating differences in the age structure of

the Polish population over successive years. The hospitalisation rate in Poland in 2023 was 1,894.5 cases per 10,000 population, exceeding the 2019 level by 4%. Compared to 2017, it was 1% lower.

Delayed or foregone hospitalisations are a significant component of the so-called health debt, understood as the cumulative delay in the provision of healthcare services resulting from disruptions in the functioning of healthcare systems in the context of the COVID-19 pandemic. The scale of this phenomenon varied across different diagnostic groups, leading to hospital treatment. The largest decrease in hospitalisation rates in 2020 was observed for infectious and parasitic diseases, where the standardised hospitalisation rate declined by 45%, followed by diseases of the respiratory system (35%) and diseases of the nervous system (34%). In the case of infectious diseases, diseases of the circulatory system, diseases of the nervous system and injuries, despite the observed upward trend, the hospitalisation rate in 2023 remains below the 2019 level.

The most common causes of hospitalisation between 2017 and 2023 were diseases of the circulatory system. Since 2020, cancer has ranked second, with a marked upward trend in hospitalisation rates – in 2023, the rate was 46% higher than in 2017.

Clear differences exist in the causes of hospitalisation between women and men. The frequency of hospitalisation due to injuries and poisoning, as well as diseases of the circulatory, respiratory and digestive systems, is significantly higher among men than among women. Additionally, from 2017 to 2023, the male predominance in hospitalisations due to diseases of the circulatory and digestive systems has increased. At the same time, the female predominance in hospitalisations for cancer, eye diseases, and diseases of the musculoskeletal system has decreased. Diseases of the genitourinary system are a notably more frequent cause of hospitalisation among women.

Most common causes of hospitalisation by age group:

Ages 0–4

- Excluding the Z00–Z99 group, which includes normal births (Z38), the leading cause of hospitalisation is conditions originating in the perinatal period – each of these categories accounts for nearly 20% of children's hospital stays;
- Respiratory diseases are a significant reason for hospital treatment in both sexes, responsible for 16.7% of hospitalisations among boys and 14.3% among girls. Other notable causes include infectious diseases (7.6% in boys *vs* 6.2% in girls), congenital malformations (6.6% *vs* 7.7%), and injuries and poisoning (6.1% *vs* 5.6%).

Ages 5–14

- Injuries and poisoning are the leading causes of hospitalisation, slightly more common in boys (20.1%) than in girls (17.4%);
- Respiratory diseases are the second most frequent cause of hospitalisation for both boys (14.5%) and girls (13.4%);
- Other important causes include endocrine, nutritional and metabolic diseases – more common in girls (9.4%) than boys (7.7%) – as well as nervous system diseases, which show similar prevalence in both sexes (5.8% in girls *vs* 5.6% in boys).

Ages 15–39

- Pregnancy, childbirth and the puerperium are by far the dominant cause of hospitalisation among women (O00–O99: 39.3%), followed by diseases of the genitourinary system (10.3%);
- Among men, the most frequent cause of hospitalisation is injuries and poisoning (28.5%), which is also the third most common cause among women (7.6%). Other significant causes for men include diseases of the digestive system (11.4%) and diseases of the musculoskeletal system (7.3%).

Ages 40–59

- Cancer is the most common cause of hospitalisation among women (18.5%), and the third most frequent among men (11.7%);
- Other leading causes among women include diseases of the genitourinary system (17.4%), which are much less common in men (5.2%), and diseases of the musculoskeletal system (9.3%), with a similar rate observed in men (9.2%);
- Injuries and poisoning remain the leading cause of hospitalisation among men (14.0%, compared with 6.6% among women);
- The second most common cause for men is diseases of the circulatory system, accounting for 13.6% and rising rapidly with age (for comparison, DCS cause 5.7% of hospitalisations among women in this age group);
- Diseases of the digestive system are also more prevalent among men (11.6%) than among women (7.3%).

Individuals aged 60 and over accounted for nearly half of all hospitalised patients in 2023 (45.7% among women and 46.7% among men), reflecting the ageing of the population.

As in the general population, the standardised hospitalisation rates for older adults dropped significantly in 2020 and have gradually returned to pre-pandemic levels. In 2023, the rate was 3,255 hospitalisations per 10,000 women and 3,907 per 10,000 men.

For both sexes aged 60 and over, the most common cause of hospitalisation was diseases of the circulatory system, followed by cancer.

Throughout the analysed period, men consistently had a higher hospitalisation rate, with the excess ranging from 18% to 26%, peaking in 2020. The most pronounced differences were observed in diseases of the respiratory system (with a 67% higher rate in men in 2023) and diseases of the circulatory system (68% higher in men in 2023). An increasing trend in hospital treatment rates among men compared to women was also observed for diseases of the digestive and nervous systems.

Only two diagnostic groups had consistently higher hospitalisation rates among women than men throughout the analysed period – endocrine, nutritional and metabolic diseases, and injuries and poisoning. The latter significantly contrasts with the trend observed in the general population, where men are much more frequently hospitalised due to injuries.

Urban residents were hospitalised slightly more often than rural residents, likely due to better access to hospital care. Throughout the analysed period, the difference in hospitalisation rates remained relatively stable – the excess in urban population hospitalisations ranged from 5.3% in 2019 to 8.5% in 2021 and 2022.

For most of the analysed disease groups, hospitalisation rates were higher among urban residents than rural ones, with the greatest differences observed for cancer (an average annual excess of 20%) and endocrine, nutritional and metabolic diseases (18%). Exceptions included pregnancy and childbirth-related conditions (with a 6% average annual excess among rural residents) and diseases of the circulatory system (4%).

In 2023, the hospital mortality rate was 2.2% for men and 1.7% for women; for the first time, these figures were lower than those recorded before the pandemic.

Among all analysed causes of hospitalisation, COVID-19 was associated with the highest hospital mortality; even after the end of the pandemic, its mortality rates remained significantly higher than those for other disease groups – in 2023, they stood at 10.9% for men and 9.7% for women.

Other leading causes of hospitalisation associated with high hospital mortality include diseases of the circulatory and respiratory systems, and infectious diseases. Notably, high mortality was also observed among patients admitted due to ill-defined causes (ICD-10: R00–R99), which may indicate insufficient diagnostic precision.

Throughout the analysed period, men experienced higher in-hospital mortality than women for hospitalisations due to: diseases of the genitourinary system, malignant neoplasms, diseases of the nervous system, endocrine, nutritional and metabolic diseases, ill-defined causes, and COVID-19. Women, in turn, died

more frequently than men when hospitalised for diseases of the circulatory system and skin diseases.

Selected issues of diseases of the circulatory system in Poland

The first year of the COVID-19 pandemic (2020) was marked by a significant deterioration in care for patients with diseases of the circulatory system.

This decline in patient care affected both inpatient and outpatient services.

The considerable deterioration in care for patients with diseases of the circulatory system observed during the first year of the pandemic led to the development of a "health debt", which has been gradually repaid in the subsequent post-pandemic years.

Data from 2022–2023 clearly indicate a trend towards recovery and the "repayment of the health debt" – the number of cardiology services has increased in an effort to make up for the backlog and meet the growing needs of patients.

After a marked increase in mortality due to diseases of the circulatory system in 2020–2021, death rates in 2023 stabilised at levels consistent with pre-pandemic trends. However, persistently high excess mortality remains evident in Dolnośląskie and Lubuskie voivodships and, to a somewhat lesser extent, in Mazowieckie voivodship.

Cancer incidence trends in Poland

The sharp increase in cancer cases and survivors may lead to a public health crisis and strain the healthcare systems in Poland (in 2022, there were 181 thousand new cases and approximately 1.35 million people living with cancer). The main challenge for the Polish healthcare system in the coming decades will be to undertake actions to reduce the number of cases, which appears to be the most urgent and cost-effective way to ensure health. Primary prevention (preventing disease onset) and secondary prevention (preventing deaths) should be the main strategies to reduce the cancer burden on Polish society. Palliative and end-of-life care for the growing number of cancer patients should also be developed. Actions should leverage the potential of evidence-based health policy. A source of reliable information (facts) is the Polish National Cancer Registry (https://onkologia.org.pl/pl). The Polish National Cancer

Registry system enables the integration of hospital systems, automating data transmission to the registry without the need for physician involvement.

Mental and behavioural disorders

Data from 2022 indicate significant changes in the psychiatric care system in Poland, encompassing an increase in the number of patients using outpatient psychiatric care, as well as hospitalisations in inpatient care. The growing incidence of mental disorders, including depression, anxiety disorders, and substance use disorders, necessitates adaptation of the healthcare system to the increasing demand for treatment and psychological support. Of particular concern is the rising number of patients hospitalised following suicide attempts, which underscores the urgent need to intensify both preventive and interventional efforts.

Disparities in access to psychiatric services between urban and rural populations remain a significant issue. Urban residents use services much more frequently, which indicates the necessity to improve psychiatric care accessibility in rural areas. Meanwhile, the predominance of male hospitalisations persists, especially in the context of alcohol and psychoactive substance use disorders.

Conclusions

- Increased demand for psychiatric services: The number of patients using mental health outpatient services and hospitalised due to mental disorders is rising, highlighting the need to expand the psychiatric care system.
- Increase in hospitalisations following suicide attempts: In 2022, there was a noticeable increase in the number of patients hospitalised after a suicide attempt across Poland, indicating the need for more effective preventive and interventional measures.
- Inequalities in access to psychiatric care: Urban residents are more likely to use psychiatric services than rural residents, suggesting limited availability of specialists in rural areas.
- Increase in patients with alcohol and psychoactive substance use disorders: This is especially evident among men, underlining the need to strengthen the addiction treatment system.
- Rising number of hospitalisations due to depression and affective disorders: This may reflect improved diagnosis, but also an actual increase in mood disorder cases.

Health policy recommendations

- Development of outpatient psychiatric care and telemedicine: To improve service accessibility, the number of psychiatric consultation centres should be increased, and telemedicine expanded, particularly in rural areas.
- Strengthening preventive and educational efforts: It is essential to intensify prevention programmes targeting depression, anxiety, and addiction, especially among children, adolescents, and older adults.
- Increasing the number of mental health professionals: Investment is needed in the training of psychiatrists, psychologists, and therapists, as well as in mental health education for primary care physicians.
- Better integration of addiction treatment with psychiatry: The rising number of patients with substance use disorders requires more effective treatment and harm reduction programmes.
- Development of a support system for individuals after suicide attempts: More effective monitoring and support systems should be implemented, including community-based care programmes and post-hospitalisation psychological support.
- Tailoring interventions to demographic differences: Mental health programmes should account for the specific needs of different groups, including women, men, youth, and the elderly.
- Monitoring mental health trends: Regular epidemiological analyses will enable better alignment of health policy with the dynamically changing needs of society.
- Implementing these actions could improve the accessibility and quality of psychiatric care in Poland and reduce the burden on the mental healthcare system.

Epidemiological situation of selected infectious diseases in Poland

Vaccination coverage among individuals aged 0–19 against vaccine-preventable diseases remains above 90% nationwide. However, data from voivodships show variability, ranging from 87% to 91%.

Although the current coverage still ensures population immunity, areas with lower coverage are at risk of outbreaks of certain infectious diseases.

The incidence of vaccine-preventable diseases is influenced by post-pandemic dynamics, variable vaccination rates, and a growing number of individuals refusing vaccination.

Although the incidence of tuberculosis continues to decline gradually, the rising proportion of multidrug-resistant tuberculosis remains a key concern.

Insufficient laboratory confirmation of suspected rubella cases is troubling, as it is necessary for accurate diagnosis and is linked to Poland's participation in the European rubella elimination programme.

The increase in cases of numerous infectious diseases in 2022–2023 largely reflects the accumulation during the pandemic of individuals susceptible to various pathogens due to reduced interpersonal contact and mobility and limited access to healthcare services for conditions other than COVID-19.

The continuous increase in newly diagnosed cases of HIV, syphilis and gonorrhoea among men who have sex with men indicates the limited effectiveness of current interventions targeting this group. Evaluation and intensification of these efforts, e.g. greater access to HIV pre-exposure prophylaxis, are essential.

Marked differences in registered incidence rates of sexually transmitted infections and HIV suggest significant underreporting to the epidemiological surveillance system in most voivodships.

High STI incidence rates in the reproductive-age population, i.e. 20–30 years, highlight the need for action regarding the potential for vertical transmission of these infections.

Rapid diagnosis and treatment are critical elements in the prevention of HIV and STIs, making integration of testing for all indicated infections and prompt treatment of diagnosed individuals essential to reduce transmission risk, including among contacts, partners of infected individuals, and those engaging in high-risk sexual behaviours.

Incidence rates of chronic infectious diseases (HIV, chronic hepatitis B and C) have returned to pre-pandemic levels, indicating that diagnostic efficacy has also returned to pre-pandemic levels, which, however, remains insufficient.

The increased influx of migrants, particularly refugees from Ukraine, has significantly impacted the epidemiology of selected infectious diseases.

Implementation of a sentinel surveillance system would be advisable to improve surveillance of respiratory infections, including COVID-19, influenza and RSV.

Adult vaccination is a key element of preventive healthcare in the face of an ageing population and increasing burden of chronic disease. Its implementation should be based on individual risk assessment, considering age, health status, occupation, and lifestyle.

Personalised adult immunisation schedules are an important public health tool, enabling effective prevention of infectious diseases, improving quality and length of life, and reducing the risk of severe health complications, particularly in high-risk populations.

Health consequences of accidents in Poland, with particular emphasis on the situation of people aged 65 and over

According to the survey conducted in March 2025, 24.8% of respondents experienced at least one accident in the past 12 months. Accidents were more frequently reported by men (27.6%) and less frequently by women (22.0%.

Based on hospital morbidity data, it can be estimated that 1% of Poland's population annually experiences an accident requiring hospital treatment, most of which are falls (56.2% of hospitalisations between 2019 and 2023).

In 2010, mortality due to accidents in Poland was 26% higher than the average in the EU-27; by 2022, this excess had decreased to 9.6%. After 2015, the decline in accident-related mortality slowed down both in Poland and, on average, in the EU-27. During the COVID-19 pandemic in 2021, an increase in mortality from accidents was observed, particularly high among those aged over 65.

The systematic improvement in road traffic safety, combined with the ongoing population ageing, has resulted in falls now being the leading cause of accidental deaths (standardised rate of 14.5 per 100,000 population). The second leading cause is transport accidents (5 per 100,000 population), followed by accidental poisoning (4.5 per 100,000 population – posing more than twice the risk to life compared to the EU-27 average).

Between 2019 and 2023, there was a marked increase in mortality due to falls among people aged 65 and over, particularly during the pandemic. Although the mortality rates declined in 2022 and 2023, they remain higher than in 2019 among the oldest age groups.

Alzheimer's disease and related disorders – an important public health problem in Poland

The chapter presents information on the recorded epidemiology of Alzheimer's disease and related disorders, estimated based on data on health services reported to the National Health Fund. The presented data indicate that Alzheimer's disease and related disorders mainly affect women, with the incidence increasing with age. Due to the population ageing, the number of patients increased in 2023 compared to 2014. The number of patients divided by population remained stable, and in some cases, the rates even decreased.

There are differences between voivodships in the European age-standardised prevalence rates. Differences are also observed depending on the patients' place of residence: the highest recorded prevalence rates of Alzheimer's disease and related disorders are observed in towns with up to 10,000 inhabitants, and the lowest in cities with 100,000 to 200,000 inhabitants and those over 200,000 inhabitants.

Analysis of sickness absence in 2022–2023

Sickness absence affects many aspects of society. It is a measure of the health situation of the population and an important indirect cost of illness.

Spending on sickness absence in 2023 amounted to PLN 26.7 billion, an increase of 4.9% compared to 2022.

There were 23.7 million medical certificates issued due to own illness, for a total of 273.5 million sickness absence days. The number of medical certificates increased by 0.6% compared to 2022, while the number of sickness absence days was 0.3% lower.

Throughout 2023, at least one medical certificate due to own illness was issued to 7,158.6 thousand insured persons. Of this number, 3,859.7 thousand women were on sick leave, accounting for 53.9% of those on sick leave. Men on sick leave at least once in the whole year constitute a group of 3,297.5 thousand insured persons; they accounted for 46.1% of those on sick leave.

An important element in the analysis of sickness absence is the absence of women whose incapacity arises during pregnancy. The share of pregnant women's sickness absence days in women's sickness absence was 25.8% of absence days (28.2% in 2022). This means that every eighth certificate was issued in connection with incapacity during pregnancy, and over a quarter of the number of days of sickness absence among women was due to incapacity during pregnancy.

In 2023, compared to 2022, the number of days spent in hospitals by persons insured with the Social Insurance Institution (ZUS) increased significantly. Hospital stays for those insured with ZUS by 7.5% days, while the number of hospital certificates was 12.9% higher. However, the average duration of incapacity to work per hospital stay was lower than in the previous year, at 4.46 days (4.69 days in 2022).

In recent years, the rate of sickness absence has been disrupted by the SARS-CoV-2 virus pandemic. Fear of contracting the disease has been added to the reasons for COVID-19-related absenteeism.

There was still COVID-19-induced absenteeism and further increases in this absenteeism in March and December of 2023. The incidence of concomitant diseases since the start of the pandemic, primarily mental illnesses, including depressive disorders in both children and adults, is not decreasing.

Subjective assessment of health and the level of satisfaction of health needs

Subjective health status assessment

The results of the 2025 survey indicate a decrease in the average self-assessed health status of women and men in Poland aged over 20 compared to 2018. Currently, 19% of men and 14% of women assess their health status as "very good", compared to 38.2% and 28.5% six years ago. The deterioration in the magnitude of this important indicator may mean an increase in the dynamics of the burden on the healthcare system in the future, beyond the observed trends.

Compared to 2018, the percentage of respondents declaring poor or very poor health increased (up to 10.0% of men and 10.6% of women in the general population), especially among people with higher and secondary education and those with a relatively good economic situation. A significant deterioration in self-assessed health status in the period described was also observed among people aged 60–74 and 75 or over. The percentage of poor and very poor health ratings is highest among people with primary education. A similar situation can be observed among individuals whose households are in a difficult economic situation. The data indicate social groups with potential below-average health status, requiring increased public health and restorative medicine interventions specifically targeted at these groups.

Prevalence of long-term health problems and chronic diseases

Compared to 2018, the number of persons reporting long-term health problems or chronic diseases increased, particularly problems that cause serious limitations in activities of daily living. The trend of worsening self-assessed health compared to 2018 is consistent with a very significant increase in the percentage of people reporting long-term health problems or chronic diseases, particularly problems that cause serious limitations in activities of daily living. This trend affects both sexes to a similar extent.

A significant proportion of the Polish population reports symptoms of moderate to severe depression (16.2% of men, 19.9% of women). This is especially true for people struggling financially and those with lower levels of education. This problem is more common in women than in men. It should be noted that the survey was conducted in September 2018 and February 2025, respectively, which may affect the percentage of people reporting symptoms of depression. However, the observed increases are worrying and require further close monitoring.

A large proportion of respondents declare symptoms of generalised anxiety. Women declare anxiety significantly more often than men (17.8% of men, 20.7% of women). The question about generalised anxiety was included for the first time in the survey. The results indicate high levels of anxiety, especially among younger people. This is worrying and requires further in-depth investigation.

A large percentage of respondents report severe pain. Once again, women declare such symptoms significantly more often than men. Almost 20% of people experiencing pain claim that it interferes with their usual activities, which still represents a high percentage: 13% of men and 17% of women in the general population aged 20 and over in Poland. The high level of reported pain in the surveyed population, requires further investigation. Pain causes increased demand for medical services and reduces economic efficiency, resulting in presenteeism and absenteeism. At the same time, many of these conditions can be prevented by modifying lifestyle and reducing risk factors such as overweight and obesity or insufficient physical activity.

Use of health services within the National Health Fund and private healthcare providers

The share of those largely or exclusively using privately financed services is significant, ranging from 24.6% in men to 22.5% in women. Such individuals relieve the burden on the publicly financed system but are potentially exposed to inefficient health expenditure due to, e.g. the lack of comprehensive and coordinated care.

The highest percentage of people using non-publicly financed services is observed in the younger population, with secondary and higher education, living in large cities (over 200,000 inhabitants) and rural areas. However, almost a third of the population who exclusively or largely use non-publicly financed services struggle to finance their health expenditures. This is indirect evidence of significant difficulties in accessing publicly financed services.

A very large percentage (significantly over 50%) of the population who find it difficult to cover their health expenditures report a high burden of health problems. It can be assumed that such individuals (in their perception) require medical services but do not have sufficient access to free services; hence, they use the

non-publicly financed sector. As a result, their health expenditure exceeds their financial capacity.

Those with a low level of education are more likely than average to report a poor health condition (12.1% of men and 16.5% of women) and are more likely to indicate severe limitations due to chronic health problems (13.1% of men and 16.9% of women). This requires in-depth research into health inequalities.

Those declaring problems with covering health expenditures are far more likely to use only publicly financed services (i.e. 46.7% of men and 52.8% of women). Those reporting a difficult financial situation are also more likely to use only health services financed by the National Health Fund; this applies particularly to women (38.0% of men and 45.0% of women). The remaining respondents from these groups declare that using non-publicly financed services to some extent means an additional burden on their household budgets. Based on the presented data, a significant group of people who are in an unfavourable financial position or are burdened by the costs of services (due to poor economic status and/or poor health status) believe that they do not have satisfactory access to publicly financed services.

A relatively large share of the surveyed population (15.7% of men and 18.2% of women) declare that they use the services of specialists only in the non-publicly financed sector. The above observation may indicate difficulties in accessing services financed by the National Health Fund and/or the prevalence of specialist services in the form of subscriptions or extra insurance. It can be assumed that those declaring the use of services provided by primary care physicians outside the National Health Fund (7.8% of men and 10.2% of women) are covered by subscriptions or additional health insurance.

Unmet health needs

A very high percentage of the surveyed population (over half of those using a given service) declare delays in access to various types of services financed by the National Health Fund due to long waiting times. This is most often the case of access to specialists, diagnostic tests, hospital care and mental health care. A significantly smaller percentage (several per cent) declares such delays due to transport issues or long distances. Delays in accessing services due to long waiting times are a very common issue among the Polish population.

A relatively small percentage of the surveyed population indicated that delays in obtaining medical services contributed to a deterioration in their health condition.

A significant share of the respondents who declared a need for medical services decided not to obtain them. The most frequent reasons were queues/

impossibility to make the appointment, difficulties reaching the healthcare facility via the phone, a potentially high cost of the paid services, and lack of time.

A significant number of the respondents declared resignation from various types of medical services. The most common cases of resignation concerned mental health care and dental services (24.5% of men and 20.0% of women, and 18.5% of men and 15.4% of women, respectively, among those needing a given service). This requires in-depth research. Access to mental health care, even non-publicly financed services, may be difficult due to the limited availability of specialists, but also other factors, such as the feeling of shame. The resignation from dental services is probably due to the low availability of public financing, high costs for the patient, or the limited availability of medicinal products for self-medication.

A relatively large share of the respondents (i.e. approximately 12–14% of those in need of a given service) resigned from a visit to a specialist or did not purchase prescribed medicines, and some of such individuals experienced a deterioration in their health status due to the lack of diagnosis or treatment. This observation indicates the need for thorough research to identify the populations and services most correlated with resignations resulting in deterioration in health.

The prevalence of behavioural health risk factors

The share of male smokers (28.8%) is slightly above the EU average, while the percentage of female smokers (20.3%) is exactly at the EU average. Since 2014, the downward trend in the share of daily smokers in Poland has halted; this trend has also been visible in other countries in recent years.

Daily smoking is reported by a greater number of men than women in all age groups under the age of 75, with the highest rates observed among men and women aged 40–59 (34.5% and 25.0%, respectively).

The highest share of smoking men is observed in the group with basic vocational education and that of women with lower secondary education or below.

For both men and women, the share of smokers in the group of those in a poor financial situation exceeds that in the other groups by approximately 50%.

Electronic substitutes of traditional tobacco products were used daily by 19.8% of men and 12.0% of women aged 20–39. In older age groups, the figures are lower (7.9% and 6.8% for men and women aged 40–59, respectively).

The share of risky drinkers depended significantly on sex and was 27.2% for men and 15.7% for women.

Among both men and women, there was a significant decrease in the percentage of risky drinking individuals with age.

Risky drinking was related to both education level and economic status. Among men, the highest share of risky drinkers was in the groups with tertiary and basic vocational education, whereas among women, it was higher among those with tertiary and secondary/post-secondary education. However, in both men and women, the responses indicating risky drinking were most common in the group of respondents who assessed their economic status as bad.

The results concerning the frequency of use of different types of psychoactive substances are worrying due to the high share of those in the youngest age group (20–39) who have tried drugs and who have used drugs in the past 12 months; for cannabis, 23.7% and 11.9%; for stimulants, 10.4% and 6.3%; for hard drugs, 6.1% and 2.5%.

Men use each type of psychoactive substance 1.4–2.5 times more often than women.

Those with the lowest education and in a poor material situation use each type of such substance significantly more often than the individuals in the other groups of respondents.

In 2025, the prevalence of excess body weight (BMI ≥ 25) among the Polish population aged 20 or over was 64% for men and 48% for women, while in the case of obesity (BMI ≥ 30), it was 15% and 13%, respectively. These problems are much more common among men, half of whom are overweight by the age of 20–39, and in the older age groups (60–84), their share exceeds ¾.

The maximum prevalence of excess body weight is recorded in the 75–84 age group (76% of men and 66% of women), and obesity is noticed in the younger age groups: aged 60–74 for women (18%) and aged 40–59 and 60–74 for men (19% each).

The risk of overweight, and especially obesity, strongly depends on the level of education. For both sexes, the situation is least favourable among those with basic vocational education – excess body weight is the case in 74% of men and 60% of women, and obesity – 19% of both subpopulations. Obesity is recorded for every fourth Polish woman with lower secondary school education or below (27%) and almost every fifth female with basic vocational education (19%), i.e. 2–3 times less often than for women with higher education (9%). The situation among men differs from the above. Those with higher education are characterised by a high prevalence of obesity (18%), while those with lower secondary school education or below have a relatively low prevalence of both excess body weight (54%) and obesity (15%).

Frequently observed severe financial difficulties contribute to obesity in women (19% vs 11% in the case of other Polish women), while it reduces the prevalence

of obesity in men (11% vs 16%), as well as excess body weight (52% vs 69%). This effect is even more noticeable after considering differences in the age structure of the compared groups. Among the materially disadvantaged, obesity is more often recorded among women, while in the case of individuals in a better financial situation, it is more often recorded among men.

The percentage of Poles with excess body weight is higher among the residents of rural areas compared to urban residents, both for men (68% vs 61%) and women (51% vs 46%). However, obesity is slightly more common among men living in urban areas (16% vs 14%).

Compared to 2018, in Poland, the prevalence of excess body weight increased by 7.2 pp among women and 5.3 pp among men, for obesity by 1.7 pp and 4.4 pp. This increase was only partly due to a change in the age structure of the population. During these 7 years, the prevalence of overweight and especially obesity increased significantly in women with tertiary education (1.5 and 2.1 times, respectively), and in the category of 20–39-year-olds (1.9 and 2.1 times, respectively). In men, there is a great decrease in the prevalence of obesity (by over 1/3) among those who constantly or frequently experience serious financial difficulties.

As many as 58% of Poles aged 20 or over do not engage in recreational physical exercises requiring at least moderate effort, and 27% do not exercise or walk at all. Only 29% of Poles follow the WHO recommendations related to the activities necessary to maintain good health.

The percentage of people undertaking physical exercise decreases steadily with age, from 54% at 20–39 to 26% at 75 or over. Moreover, 41% of the youngest and 15% of the oldest Poles declare that they follow the WHO recommendations. At the age of 20–39, men are more active than women; at 60 or over, Polish women exercise more often than their peers (at 60–74, 71% of men and 65% of women are inactive).

The engagement in recreational exercises of both genders increases with the level of education. The percentage of Poles with tertiary education following the WHO recommendations compared to those with primary education is 2.4 times higher for men (37% vs 15%) and as much as 3.6 times higher for women (36% vs 10%). Recreational exercises are not undertaken at all by 79% of men with primary education and 48% with tertiary education. For women, the percentages are 84% and 48%, respectively.

Those experiencing permanent or frequent financial difficulties are much more likely not to engage in recreational physical activity (64% vs 55%). They are also less likely to follow the WHO recommendations (24% vs 31%), even considering only those who exercise (67% vs 70%).

The WHO recommendations regarding physical activity for young people for proper development and health maintenance are met by a small proportion of Polish students, and their percentage decreases with age and amounts to: 29% for boys and 21% for girls aged 11–12, 27% and 17% among 13–14-year-olds, respectively, and 19% and 12% among 14–15-year-olds (data from the Health Behaviour in School-aged Children (HBSC) study from 2022). In all age groups under consideration, boys are more active than girls. Although the level of youth activity has increased compared to 2018, the situation is still less favourable than in 2014.

Overall, behavioural risk factors are responsible for 26% of healthy life years lost in Poland (31% in men and 20% in women) and contribute to 36% of deaths (43% and 29% in the gender groups, respectively).

Eating habits of Poles

Eating habits and nutritional status of infants, children and adolescents

Based on available data on the diet and nutritional status of infants aged 5–36 months, children of early school age (7–9 years), and older children and youth (11–17 years), a set of recommendations was formulated to improve the health of the child population in Poland.

It is advisable to strengthen antenatal education on the benefits of breastfeeding for both mother and child. It is essential to enhance lactation support in maternity wards, particularly among mothers of preterm infants and those who delivered by caesarean section. Education on the benefits of breastfeeding should begin already during pregnancy, as part of antenatal classes led by midwives, and should continue during postnatal home visits, during which the midwife encourages the mother to breastfeed, provides lactation counselling, and helps resolve breastfeeding problems. Care for the mother, including breastfeeding support and lactation counselling, should be continued by the midwife for as long as the mother requires it.

Among parents of infants and children aged 1–3 years, efforts to promote breastfeeding should be continued, along with broad education on the principles of proper nutrition in the early years of life. Shaping healthy eating habits in early childhood significantly reduces the risk of diet-related diseases in later stages of life. It is recommended to develop educational support tools and to introduce dietary consultations within primary health care.

Established but unsatisfactory dietary patterns are observed in the population of children aged 7–9 years. The relatively regular consumption of fruit and

vegetables, especially among girls, contrasts with the significantly low consumption of fish, legumes and fermented milk drinks. High consumption of sweets and sweetened drinks remains a significant problem, which is combined with increasing rates of overweight and obesity, particularly among boys. It is recommended that consistent nutrition standards be introduced in schools and nursery schools, that the availability of highly processed foods be limited, and that educational activities on how to compose a proper diet be developed.

In the group of school children and adolescents aged 11–17, the irregularity of breakfast consumption, which increases with age, becomes a challenge, as well as the persistently high consumption of products with low nutritional value. Gender differences indicate the need for differentiated measures. Girls are more likely to skip breakfast, which may be due to lower levels of appetite in the morning or issues related to self-esteem associated with body weight, while boys are more likely to be overweight and obese, which may be related to higher consumption of high-calorie foods and lower nutritional awareness. It is necessary to strengthen prevention and health education in schools, promote physical activity and other aspects of a healthy lifestyle, as well as to ensure access to individual dietary consultations in cases of identified irregularities.

The conclusions from the analysis clearly indicate the need to implement a comprehensive, nationwide strategy to promote healthy nutrition among children and youth, including health education, family support, environmental measures and systematic monitoring of nutritional status. It is also recommended that the available forms of dietary counselling be further developed, taking into account the individualisation of activities depending on age, gender, and detected irregularities.

Food consumption in households and dietary habits of adults

The data from the household budget surveys show a decrease in the consumption of some products, especially in 2020–2023. The consumption of cereals, vegetables, potatoes, processed meat products, milk, sugar and soft drinks, with the exception of mineral and spring water, decreased. Fluctuations in consumption were recorded for the other analysed product groups.

The decline in consumption of the products mentioned above was associated with a decrease in the energy value of the diet in 2020–2023, and a lower content of macronutrients, most minerals and vitamins.

The eating habits of Poles continued to deviate from the recommendations, as in previous years. Above all, the consumption of vegetables and fruit was insufficient, while the amount of red meat, meat products, and salt consumed was too high.

The diet of Poles was characterised by a relatively high proportion of energy from total fat, with saturated fatty acids providing a particularly large amount of energy. In addition, the intake of fibre, some minerals and vitamins, especially calcium and vitamin D, was too low.

The assessment of the eating habits of adults confirmed irregularities in the diet of Poles. It was observed that Poles did not consume the recommended daily portions of vegetables and fruit, the frequency of consumption of whole-grain products, milk and dairy products was insufficient, and sea fish and legumes were rarely consumed. A large number of the respondents often consumed red meat and meat products, as well as sweets.

More unfavourable dietary habits were observed in men, who consumed fewer recommended daily portions of vegetables and fruit than women, ate more red meat, meat products and fast food products than women, and drank more energy drinks. In contrast, women were slightly more likely to consume sweets. Differences in dietary habits depending on age and place of residence were mostly insignificant.

Based on an earlier study, conducted in 2022, many dietary habits of Poles also deviated from the recommendations: the amount of consumed vegetables, fruit and sea fish was too low, and sweets were consumed too often. The consumption of whole grain cereals, milk and dairy products, red meat and meat products and legumes was not analysed at that time.

On top of the fact that dietary patterns deviated from the recommendations, some Poles did not feel the need or did not want to eat healthily. The positive information is that the percentage of those with such an attitude is currently lower than in 2022.

Given the persistent irregularities in the diet of Poles and the lack of interest of some people in healthy eating, it is extremely important to implement comprehensive actions to change nutritional habits, with the primary purpose of improving eating habits.

Assessment of changes in PM2.5 concentrations and health effects resulting from long-term exposure to these concentrations in Poland in the period 2019–2023 in the light of the revision of EU Directives and WHO guidelines

Actions undertaken over the past five years (2019–2023) to reduce emissions of air pollutants indicate a clear improvement in air quality and a decline in annual average PM2.5 concentrations.

Non-compliance with the currently applicable legal annual average limit value of 10 μg/m3 for PM2.5, established in Poland and the European Union to protect human health, concerns 3.5% of powiats in Poland (13 out of 380). The introduction of a stricter limit by Directive (EU) 2024/2881 of the European Parliament and of the Council of 23 October 2024 on ambient air quality and cleaner air for Europe, which sets the first-level limit at 10 μg/m3, will require an intensification of current efforts, as non-compliance with this new standard currently applies to over three-quarters of powiats (299 out of 380).

For every powiat in Poland, with the exception of the city of Legnica, the period 2019–2023 saw negative values of the medium-term rate of change, indicating an improvement in air quality. Unfortunately, a high rate of improvement, exceeding -10% per year, was observed in only one-quarter of powiats (93). This means that in powiats where the rate of change is lower, achieving compliance with the stricter PM2.5 limit by 2030 will be very difficult, if not impossible.

Improvements in air quality have a measurable impact on reducing the health effects resulting from exposure to air pollution. High negative values of the medium-term rate of change in the number of premature deaths, exceeding -10% per year, are observed in nearly 68% of powiats (257). This means that even relatively small reductions in the population's exposure to PM2.5 lead to a significant decline in health impacts, with the rate of change being higher than that of air pollution concentrations, also influenced by population decline.

The most polluted cities in the period 2019–2023 in terms of annual average concentrations of PM2.5 particulate matter were Świętochłowice, Chorzów, Piekary Śląskie, Rybnik, Zabrze, Siemianowice Śląskie, Bytom, Jastrzębie-Zdrój, Żory, Ruda Śląska, and Nowy Sącz. These cities do not comply with the applicable average annual limit value of 20 μg/m3 for PM2.5 concentrations. At present, among the 66 cities with powiat rights, the stricter limit value introduced by Directive (EU) 2024/2881 (10 μg/m3) is met in only five: Gdynia, Gdańsk, Świnoujście, Sopot, and Zielona Góra, while the WHO's recommended value is met only in Gdynia and Gdańsk.

Public health activities implemented in Poland in 2022–2023, reported in the Profibaza system, in response to the health needs of migrants and war refugees from Ukraine

In the years 2022–2023, a total of 3,198 activities were implemented in Poland in support of the health of Ukrainian migrants and war refugees, of which 1,423

(44.5%) took place in 2022, i.e. in the first year after the outbreak of war with Russia The greatest share of measures was implemented in the following voivodships: Śląskie (415 activities), Kujawsko-Pomorskie (342) and Lubuskie (322). One in three activities was implemented throughout the entire calendar year (1,120 activities; 35.0%), while 13.5% (433 activities) were one-day events.

The highest number of measures was targeted at groups of less than 100 people (1,110 activities, 34.4%) and between 101 and 1,000 people (1,131, 35.4%). The activities were mostly targeted at people regardless of age, i.e. adults and children (1,535, 48.0%), regardless of sex (2,743 activities, 85.8%) or regardless of place of residence (2,108 activities, 65.9%).

In response to health challenges – particularly those highlighted by the COVID-19 pandemic – in 2022, the WHO introduced a proposal for a renewed list of Essential Public Health Functions (EPHFs). Among the 12 EPHFs presented were: EPHF1 Monitoring and evaluating the population's health status, health service utilisation and surveillance of risk factors and threats to health (EPHF2 Public health emergency management, EPHF5 Protecting populations against health threats, including environment and occupational hazards, communicable disease threats, food safety, chemical and radiation hazards, EPHF6 Promoting prevention and early detection of diseases, including noncommunicable and communicable diseases, EPHF7 Promoting health and well-being and actions to address the wider determinants of health and inequity) and seven enabling-oriented functions (EPHF3: Assuring effective public health governance, regulation and legislation, EPHF4 Supporting efficient and effective health systems and multisectoral planning, financing and management for population health, EPHF8 Ensuring community engagement, participation and social mobilisation for health and well-being, EPHF9 Ensuring adequate quantity and quality of public health workforce, EPHF10: Assuring quality of and access to health services, EPHF11: Advancing public health research and EPHF12 Ensuring equitable access to and rational use of essential medicines and other health technologies).

All activities targeting migrants and war refugees, reported in the ProfiBaza system, were classified according to the respective Essential Public Health Functions. Each activity, depending on its scope, was associated with more than one EPHF. Among the activities undertaken in support of the health of migrants and war refugees, those relating to services-oriented functions predominated (2,991 activities; 93.5%), in particular: EPHF5 (1701 activities), EPHF6 (2654 activities), EPHF7 (2151 activities).

As part of the monitoring and assessment of population health and surveillance of health risks and threats (EPHF 1), 348 activities (10.9%) were

implemented. These included the collection and analysis of data related to the epidemiological situation, population health status and its determinants (329 activities; 94.5%), primarily in the context of environmental health (111 activities; 31.9%), infectious diseases (100 activities; 28.7%) and behavioural risk factors (24 activities; 6.9%). Monitoring the population's health status aimed to assess the scale of health problems, both those affecting the migrant and refugee population from Ukraine and the native population, their trends, and regional variations. This made it possible to identify areas of priority importance for public health and existing health inequalities.

In the area of health protection (EPHF 5), activities involved the provision of health services in the context of, among others, environmental health (642 activities; 37.7%), health protection in educational and occupational settings (294 activities; 17.3%), food safety (171 activities; 10.1%), road safety (15 activities; 0.9%), and patient safety, including pharmacovigilance, monitoring of adverse vaccine reactions, and control of infectious diseases and healthcare-associated infections (31 activities; 1.8%).

A total of 2,654 activities (83.0%) were carried out in the field of disease prevention (EPHF 6). Within the scope of primary prevention, this mainly included health education (2,312 activities; 87.1%) and, to a lesser extent, vaccination (682 activities; 25.7%, with vaccinations administered in only six programs). These activities targeted both individuals and their living environments in order to reduce the likelihood of disease or health disorders and to build health literacy and trust in vaccinations among Ukrainian migrants and war refugees. These tasks were often multisectoral and involved institutions from the health care, social care and education sectors as well as local government units and NGOs. Secondary prevention (158 tasks; 6.0%) included early detection of diseases and rapid corrective action to stop disease progression. The screening tests included early detection of cancer, hearing and vision impairments, metabolic diseases (including diabetes) and infectious diseases (e.g. hepatitis, COVID-19). Tertiary prevention focused on therapeutic and rehabilitative actions (64 tasks; 2.4%) aimed at reducing the impact of illness and the risk of recurrence, mainly in the area of medical rehabilitation and disability prevention.

Health promotion (EPHF 7) comprised 2,151 activities (67.3%) targeted at communities, including migrants and war refugees, focusing on interventions aimed at changing individual behaviours, lifestyles, and living environments (e.g. environmental and psychosocial factors), in order to enhance control over health and its determinants. The activities were mostly educational (1,653 activities; 76.8%), and one in ten involved building a health-friendly environment or

modifying the surroundings (247 activities; 11.5%). The most common initiatives promoted healthy lifestyles and health behaviours (1,476 activities; 68.6%). One in three health promotion activities addressed mental and social health (789 activities; 36.7%). The most frequently addressed topics included infectious diseases such as HIV/AIDS and vaccine-preventable diseases (533 activities; 24.8%). These activities were carried out in locations frequented by migrants and war refugees, reflecting a so-called community-based approach to health promotion, including educational institutions (766 activities, 35.6%), recreation/sports/leisure facilities (230 activities, 10.7%), public utility institutions such as libraries (224 activities, 10.4%) and the media/virtual space (189 activities, 8.8%).

Within the enabling-oriented functions, the highest number of activities were carried out in the areas of community engagement and social participation (EPHF 8) – 935 activities, ensuring health service quality and equity (EPHF 10) – 336 activities, and supporting health systems and multisectoral planning and financing of public health services (EPHF 4) – 317 activities.

Identification of the most significant health problems affecting the population of Poland and its voivodships based on results of the Blobal Burden of Disease (GBD) study

The overall health situation in Poland, as measured by the DALY disease burden indicator, outside of the COVID-19 pandemic that occurred in 2021–2022, has shown the following trends since 1990: there has been a substantial decrease in the rates for diseases of the circulatory system (DCS) (a 30% actual reduction between 1990 and 2021), and an increase in the burden from neoplasms (+25%; 1990–2021), which have nearly equalled the burden levels of CVD. The leading public health threats in Poland are diseases of the circulatory system and cancer, which together account for the majority of health loss through premature deaths (over 90%) (YLL). Their burden mainly stems from high mortality: for diseases of the circulatory system, the YLL rate is 7,057.0 per 100,000 population with 668.6 YLD per 100,000, and for cancer, it is 6,971.0 YLL per 100,000 with 194.5 YLD per 100,000 population. In 2021, due to the COVID-19 pandemic, respiratory diseases ranked third, with 5,048.3 YLL per 100,000 and 352.5 YLD per 100,000. In contrast, for musculoskeletal disorders, injuries, mental health disorders, and diabetes, the disease burden stems mainly from living with disability (YLD).

The level of health loss in Poland varies by sex and voivodship of residence. In 2021, the value of disability-adjusted life years (DALYs) due to all causes among men was 45,307.2 DALYs per 100,000. The highest regional disease burden was recorded in Łódzkie voivodship (51,515.7 DALYs per 100,000), and the lowest in Małopolskie (39,820.3 DALYs per 100,000).

Among women, the total burden in 2021 was 36,176.4 DALYs per 100,000. The voivodships with the lowest rates from all causes were Małopolskie (32,354.0 DALYs per 100,000) and Podkarpackie (32,636.2 DALYs per 100,000), while the highest rate was noted in Łódzkie voivodship (41,089.1 DALYs per 100,000).

The analysis of COVID-19 data for 2020–2021 reveals significant differences in the rates of healthy life years lost, both among European countries and within Polish voivodships. In 2021, a clear increase in the DALY rate was observed compared to 2020, with the highest values recorded in Hungary (6,886.6 DALYs per 100,000) among countries and in Lubelskie voivodship (5,537.3 DALYs per 100,000) in Poland.

The dynamics of disease burden changes indicate that between 1990 and 2021, there was a substantial decrease in Poland's age-standardised DALYs (-25%). The largest reduction occurred in Pomorskie voivodship (-31%) and the smallest in Świętokrzyskie (-18%). However, in the shorter period of 2010–2021, Poland saw a slight increase in disease burden (+3%), particularly in Mazowieckie (+8%), Podlaskie (+7%), and Podkarpackie (+5%) voivodships, which was the result of the COVID-19 pandemic.

Over the 30-year period (1990–2021), Poland recorded a significant reduction in disease burden (-59%) for diseases of the circulatory system, with the most substantial improvement in Mazowieckie voivodship (-66%) and the least in Świętokrzyskie (-44%). Between 2010 and 2021, the greatest reduction was observed in Łódzkie voivodship (-34%).

The 30-year trend for cancer shows a clearly weaker improvement than for diseases of the circulatory system, with a national decrease of 21%. The best results were achieved in Pomorskie voivodship (-37%) and the weakest in Świętokrzyskie (-6%). Over the 2010–2021 period, the national average reduction was -12%.

In 2021, the main risk factors responsible for the disease burden among men (actual, unstandardised values) in Poland were tobacco use (13.5% of total burden), alcohol use (8.9%), and high systolic blood pressure (9.6%). Among women, the leading risk factors were high BMI (8.9%), high systolic blood pressure (9.2%), and dietary risks (8.5%). For both sexes, the contribution of risk factors showed considerable regional variation.

Healthcare expenditure and infrastructure of the healthcare system

There has been a steady increase in total healthcare expenditures throughout the years, but the percentage of GDP allocated to healthcare remains relatively low compared to other European countries (6.7% in 2022) and the EU average of 9.9%.

The structure of public and private expenditure has remained virtually unchanged for years, with public expenditure accounting for around 70% and private expenditure for 30%. It is worth noting the significant expenditure on non-reimbursable benefits (mainly medicines), which account for over 20% of current healthcare expenditure.

The structure of expenditure has not changed significantly over the years, with medical services consistently accounting for over 50%. The lack of growth in expenditure on prevention and public health is worrying, as it has been hovering around 2–3% for years and has been on a downward trend in recent years.

In the context of healthcare resources, the age structure of nurses and midwives is a significant problem – according to forecasts by the Polish Chamber of Nurses and Midwives, by 2030, as many as 65% of currently employed nurses and 60% of midwives will be of retirement age. The declining number of nurses is also evident in other OECD countries.

Despite seemingly sufficient bed capacity, there is still a problem with their utilisation, which generates additional costs for the healthcare system. Another problem is the uneven distribution of bed capacity across the country.

In view of the ongoing ageing of the Polish population, efficient geriatric care is an essential element of the system. The results of the Supreme Audit Office's audit indicate, among other things, that there are many gaps to be filled in this area, including an insufficient number of geriatric specialists and nurses, an uneven distribution of geriatric facilities and wards across the country, and a complete lack of such centres in some regions.