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## Public Health

Wales Observatory

# Our Healthy Future 

 IndicatorsExploration of selected indicator data for Wales


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## 1. I ntroduction

This document accompanies the publication of indicator data for Our Healthy Future (OHF) priority outcomes. It provides an analysis of the data at the Wales level for most of the indicators chosen.

Many of the indicators are for persons i.e. males and females combined, and so this document includes a breakdown by age and sex at the Wales level. Where possible the distribution of values is also investigated to further understand the patterns. In addition to the interactive data file used to publish the data, this document is intended to give further information on the indicator data. For technical details of the indicator definition and data sources please see the technical guide on the web page http://www.wales.nhs.uk/sitesplus/922/page/65976

## 2. Population free from a common mental disorder

This indicator estimates the percentage of the population free from a common mental disorder. The Mental Health Inventory 5 score (MHI-5 score) is derived from five questions in the SF-36 questionnaire in the Welsh Health Survey and is self-reported. Those with a MHI-5 score of 60 and over are considered free from a common mental disorder (see the technical guide for further details). Figure 1 shows the age and sex breakdown for this measure. There are relatively small differences between the age groups compared to other indicators. For males in the 16-24 age group 84\% are considered to be free from a common mental disorder, generally decreasing with age to $75 \%$ in those aged $75+$. For females the percentage is slightly lower than for males in all age groups and has decreased from 75\% in the youngest to 70\% in the oldest age group.

Figure 1:
Percentage of adults free from a common mental disorder (Mental Health
Inventory 5 score > 60), aged 16+ by age band, 2010
Produced by Public Health Wales Observatory, using Welsh Health Survey (WG)


The chart in Figure 2 shows the distribution of MHI-5 summary scores in ranges of 10, with higher scores indicating better mental health. The five questions may be linked and not independent of each other and the scores are therefore unlikely to be linear and normally distributed. The percentages in each score band rise with increasing score from $1 \%$ with scores of $0-10$ to $30 \%$ of males and $25 \%$ of females with scores of $81-90$. Only around $15 \%$ of males and $10 \%$ of females report the highest scores of 91-100 indicating the best mental health. A higher percentage of males than females report the highest scores of 81-100, whilst a higher percentage of females than males report the lower scores (bands 0-80).

Figure 2:

Mental Health I nventory 5 score ( $\mathrm{MHI}-5$ ) aged 16+, percentage in ranges of scores, 2010
Produced by Public Health Wales Observatory, using Welsh Health Survey (WG)


## 3. Percentage of adults who smoke

This indicator measures the percentage of adults (aged 16+) who reported smoking either daily or occasionally. Figure 3 shows the age and sex breakdown for 2010. The proportion of smokers in males is highest in those aged $25-34$ with $37 \%$ followed by those aged $35-44$ with $31 \%$. This decreases with age to $8 \%$ in those aged $75+$. The peak percentage in females is lower than in males and is found in those aged 16-34 with $27 \%$ smokers. This also decreases with age from age 35-44 onwards.

Figure 3:
Percentage of adults who reported being a current smoker, by sex, aged $16+$ by age band, 2010
Produced by Public Health Wales Observatory, using Welsh Health Survey (WG)


## 4. Average days of physical activity

This indicator measures the average number of days in the past week where adults report undertaking at least 30 minutes of moderate or vigorous physical activity. The number of days is capped at 5 days (for those with activity on 5-7 days). This means that this indicator measures the progress of the less physically active. Figure 4 shows the age and sex breakdown for this measure. The average number of days is greater for males than for females in all age groups. It is highest in the younger age groups and declines with age, particularly from the 55-64 age group onwards.

Figure 4:
Average number of days with 30 minutes of moderate or vigorous physical activity in
the past week (capped at 5 days), by sex, aged $16+$ by age band, 2010
Produced by Public Health Wales Observatory, using Welsh Health Survey (WG)


Figure 5 shows the distribution of the reported days with 30 minutes of moderate or vigorous physical activity which roughly displays a U-shaped pattern. Around 31\% of males and $36 \%$ of females reported not achieving a single day with 30 minutes of physical activity in the past week, whilst $37 \%$ of males and $24 \%$ of females reported 5 days or more. The remaining adults reported between one and four days' physical activity ( $32 \%$ in males and $40 \%$ in females).

Figure 5:
Percentage of adults reporting the number of days with 30 minutes of moderate or vigorous physical activity in the past week, by sex, aged 16+, 2010
Produced by Public Health Wales Observatory, using Welsh Health Survey (WG)


Figure 6 shows the distribution of the number of days with at least 30 minutes of moderate or vigorous physical activity for each 10 -year age band. As with the pattern for all ages, those reporting either none or five or more days were the largest groups with more than half of the respondents together. Not achieving a single day was reported by $20 \%$ in the youngest age group, rising to $72 \%$ in those aged $75+$. Five or more days of activity were reported by $38 \%$ in the youngest age group, declining slowly with age to $10 \%$ in those aged $75+$. Those with one to four days of activity varied between $18 \%$ and $44 \%$ of respondents amongst the age groups and declined with age.

Figure 6:
Percentage of adults reporting the number of days with $\mathbf{3 0}$ minutes of moderate or vigorous physical activity in the past week, aged $16+$ by age band, 2010 Produced by Public Health Wales Observatory, using Welsh Health Survey (WG)


## 5. Eating five portions of fruit and vegetables

This indicator measures the percentage of adults who reported eating five or more portions of fruit and vegetables the previous day. In line with guidelines which emphasise that a variety of fruit and vegetables should be consumed, rules for certain foods were applied to the survey responses. Respondents could obtain no more than one portion of their daily intake from fruit juice, one portion from pulses, and one from dried fruit.

The percentage of males eating five or more portions varies from 29\% in 25-34 year olds to $37 \%$ in the 65-74 year olds. The percentage of females with five or more portions is generally higher than for males, and displays a rising pattern with $31 \%$ in the youngest age group to the peak of $43 \%$ in the $55-74$ year olds. It drops again to 29\% in those aged 75+.

Figure 7:
Percentage of adults who reported eating five portions of fruit and vegetables per day, by sex, aged $16+$ by age band, 2010
Produced by Public Health Wales Observatory, using Welsh Health Survey (WG)


Figure 8 shows the percentage of males and females that have reported consuming a particular number of portions of fruit and vegetables on the previous day. The number of portions reported could, for example, be two and a half portions. This would be counted as 2 (whole) portions in the chart. The percentage of males eating two or fewer portions on the previous day was greater than the percentage for females. Conversely, the percentage of females eating between three to nine portions was greater than for males. The peak in the distribution was three portions for females and two portions for males. It is also worth noting that there is a small proportion of outliers where respondents have reported over 20 portions. It is unclear if these are realistic results, but they are included in any analysis published by the Welsh Government.

Figure 8:

Percentage of respondents reporting portions of fruit and vegetables consumed the previous day, aged 16+, 2010
Produced by Public Health Wales Observatory, using Welsh Health Survey (WG)


## 6. Adults who are overweight or obese

This indicator measures the percentage of adults who are classed as being either overweight or obese based on self-reported height and weight. A body mass index (BMI) of 25 to under 30 is classed as overweight whilst a BMI of 30 or over is classed as obese. Figure 9 shows the age and sex breakdown for this indicator for 2010. The percentage of males that are overweight or obese rises from $32 \%$ in the 16-24 year olds to $75 \%$ in the $45-54$ year old age group and decreases with age to $55 \%$ in those 75 and over. The percentage of overweight and obese males is higher than for females with the largest gap of 20 percentage points in the $35-44$ year olds. The percentage of overweight and obese females rises from 29\% in the youngest age group to $63 \%$ in the 65-74 year olds. The percentage is lower again in those aged $75+$ with $48 \%$.

Figure 9:
Percentage of adults who are overweight or obese (based on a BMI of $\mathbf{2 5 +}$ ), by sex,
persons aged $16+$ by age band, 2010
Produced by Public Health Wales Observatory, using Welsh Health Survey (WG)


Figure 10 shows the reported BMI in the different categories. A BMI of under 18.5 is classed as underweight, a BMI of 18.5 to under 25 as a healthy weight, a BMI of 25 to under 30 as overweight, and a BMI of 30 and over as obese. As described earlier, a BMI of 25 and over combines those who are overweight and obese. Around $36 \%$ of males report having a healthy weight, $40 \%$ report being overweight and $22 \%$ obese (rounded percentages). More females than males report a healthy weight with 45\%, $31 \%$ are overweight and $21 \%$ are obese. Around $2 \%$ of males and $3 \%$ of females report being underweight.

Figure 10:
Reported Body Mass I ndex (BMI ), percentage in weight group, by sex, aged 16+, 2010
Produced by Public Health Wales Observatory, using Welsh Health Survey (WG)


Figure 11 shows the breakdown in BMI categories across the age groups. In the two younger and the oldest age groups, those with a healthy weight are the largest group with $63 \%$ in the $16-24$ year olds, $47 \%$ in those aged $25-34$ years and $46 \%$ in those aged $75+$. In the youngest age group $22 \%$ are overweight and $9 \%$ are obese, steeply rising to $31 \%$ and $20 \%$ respectively in the $25-34$ year olds. It increases further to around $40 \%$ overweight and $28 \%$ obese in the $45-64$ year olds before generally decreasing with age. In the youngest age group 6\% are underweight decreasing to $1 \%$ for most age groups but rising to $3 \%$ in those aged $75+$.

Figure 11:
Reported Body Mass I ndex (BMI), percentage in weight group, aged 16+ by age band, 2010
Produced by Public Health Wales Observatory, using Welsh Health Survey (WG)


## 7. Alcohol-specific hospital admissions

This indicator measures the rate of persons admitted to hospital with alcohol-specific conditions. This definition contains only those conditions that are entirely due to alcohol, and not those that partly due to alcohol. Where a person resident in Wales has been admitted more than once, only one admission is counted per year. Figure 12 shows the age-specific rates per 100,000 population for five-year age bands. For males the rates show a bell-shaped pattern with rates rising steeply with age with the highest rates in the 45-59 year olds. The male rates then decrease with age from there on. For females the rates are around half the male rate or less for most age groups. The peak in rates is at slightly younger ages in the 35-49 age groups, decreasing with age from 50-54 onwards.

Figure 12:
Alcohol-specific hospital admissions (person-based), age-specific rates per 100,000 persons, Wales residents, 2010
Produced by Public Health Wales Observatory, using PEDW (NWIS) \& MYE (ONS)


## 8. Hospital admissions for hip fractures

This indicator measures European age-standardised rates of emergency hospital admissions in those aged 65+ with a primary diagnosis of hip fracture. Figure 13 shows the age and sex breakdown for this indicator in five-year age bands. The rates for females are nearly twice as high as the rates for males. Rates increase steeply with age with the rate for males around 15 times in those aged $85+$ compared to the $65-69$ year olds, and 20 times the rate respectively for females.

## Figure 13:

Emergency admissions for hip fractures, age-specific rates per 100,000, Wales residents, persons aged $65+$
Produced by Public Health Wales Observatory, using PEDW \& MYE (ONS)


