

# HEALTH IMPACT ASSESSMENT

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**Worcestershire Minerals Local Plan**

**July 2018**

## Introduction

Health Impact Assessment (HIA) is a process which ensures that the effects of development on both health and health inequalities are considered and responded to during the planning process.

This Health Impact Assessment assesses the potential positive and negative impacts of the Minerals Local Plan (MLP) on the local population of Worcestershire and its surroundings with particular emphasis on disadvantaged sections of communities that might be affected by this document. This assessment also identifies how the MLP should address these impacts, whether by minimising the undesirable effects or by enhancing those outcomes that are already potentially beneficial.

## Minerals Local Plan

The Worcestershire Minerals Local Plan will guide how much and what minerals the county needs to be able to supply, where minerals should be extracted, how sites should be worked and how they should be "restored" when working has finished and how minerals development should protect and enhance Worcestershire's people and places. Once it is adopted it will replace the existing minerals policies in the County of Hereford and Worcester Minerals Local Plan and will be part of the Development Plan for Worcestershire, to be used to make decisions about planning applications for mineral extraction, processing and restoration in the county.

## Policy context

[The National Planning Policy Framework, 2012 \(NPPF\)](#) recognises the need to understand and "*take account of the health status and needs of the local population including expected future changes, and any information about relevant barriers to improving health and well-being.*"

The national [Planning Practice Guidance \(PPG\)](#) recognises that, in relation to planning applications, HIA may be a useful tool to identify where significant impacts on the health of local people are expected.

## Scope

This assessment has been developed by the Minerals and Waste Planning Team in cooperation with the Directorate of Public Health at Worcestershire County Council.

The health and wellbeing context of the Worcestershire population has been sourced from the Public Health England datasets and data provided for the Worcestershire Joint Health and Wellbeing Strategy 2016-2021 available in the Worcestershire County Council's [Joint Strategic Needs Assessment webpages](#).

The Worcestershire County Council's HIAs in Planning Toolkit has been used to establish the discussion points for this assessment. The assessment tested the Third Stage Consultation version of the emerging Minerals Local Plan against a number of impacts, both positive and negative, that may occur as a result of its policies. The HIAs in Planning Toolkit can be accessed at [http://www.worcestershire.gov.uk/homepage/109/joint\\_strategic\\_needs\\_assessment](http://www.worcestershire.gov.uk/homepage/109/joint_strategic_needs_assessment)

## Appraisal

Mineral development could have both positive and negative effects leading to changes in health outcomes for the local and wider population. The potential for these impacts

will vary according to the nature, size, location and duration of the development, and can change over its lifetime.

This assessment has identified the likely impacts of the minerals developments in Appendix B which can be summarised as:

- Minerals production can support economic growth and create a number of direct and indirect opportunities for health and wellbeing
- Adverse environmental impacts of new minerals developments both during the construction and operational period
- Positive direct and indirect impact on public health and wellbeing through the restoration of the minerals sites including opportunities for recreation, active travel, social interaction etc.
- Some negative impact on healthy food production associated with the loss of the best and most versatile agricultural land

The assessment identified that the MLP policies are set out to mitigate many likely adverse impacts of mineral developments. Additionally, policy MLP 16 Health and Quality of Life and the HIA requirement will ensure that the wider health and wellbeing issues are considered and embedded in minerals developments during the operational period and as a result of their restoration.

### **Recommendations**

Notwithstanding the above, the following actions in relation to the MLP are recommended in order to enhance the opportunities for health and wellbeing:

- **Health and wellbeing principles in the Green Infrastructure Concept Plans** - The restoration of the minerals sites offers multiple opportunities for health and wellbeing such as provision of green spaces, improvement to public rights of ways or mitigation of climate change. The planned approach to the design of these sites will be crucial in unlocking these benefits. This is why the preparation of Green Infrastructure Concept Plans setting out the design principles for the forthcoming minerals development sites is supported in this assessment. Health and wellbeing should be one of the core considerations of these Green Infrastructure Concept Plans.
- **A Health Impact Assessment checklist** the MLP introduces the requirement for the Health Impact Assessments to be produced for new minerals developments. The inclusion of a HIA checklist is recommended. The HIA checklist is a list of health and wellbeing principles related to minerals developments serving as a guide to completing HIAs by the minerals providers. The HIA checklist will ensure that appropriate health and wellbeing matters are assessed and addressed during the operational and mineral restoration periods. Para 7.39 of the MLP refers to Public Health England Gateway which will provide a necessary "know-how" to the minerals providers. However, the MLP could refer to a HIA checklist to be prepared at the later stage. This would help to ensure

that all mineral development related health considerations will be covered in any prospective HIAs. It will also provide more certainty to the industry on what they are expected to submit and limit time they need to spend identifying the relevant document on the website.

- **Focus on health and wellbeing opportunities in MLP 16 Health and Quality of Life** – Appropriate wording is needed in policy MLP 16 to ensure that focus is not only on reducing negative impacts but that the restoration of minerals sites makes full use of opportunities to provide health and wellbeing enhancements.

### **Appendix A: Worcestershire Health Profile**

Overall health in Worcestershire is better than the England average. Despite this there are some serious ongoing challenges to health and well-being<sup>1</sup>:

- A growing number of elderly people and people with complex health needs;
- An ongoing burden of avoidable ill-health related to lifestyles - about two thirds of adults are overweight or obese, a third of men and half of women don't get enough exercise, about a third of adults? drink too much alcohol, and one in six adults smoke;
- An increasing cost of providing health care due to the introduction of expensive new drugs and technologies and the growing population living with complex health needs
- Persistent inequalities between the most disadvantaged and the most affluent
- communities - the average number of years a person born today in Worcestershire would expect to live in good health is 15.4 years lower for men and 14.3 years lower for women in the most disadvantaged 10% of communities compared to the 10% most affluent.

The full Worcestershire health information is available in the Public Health England's Health Profile 2016 below.

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<sup>1</sup> Worcestershire Health and Wellbeing Board (2016) Joint Health and Wellbeing Strategy 2016-2021



# Worcestershire

County

This profile was published on 4th July 2017  
Deprivation map (page 2) revised on 4th April 2018



## Health Profile 2017

### Health in summary

The health of people in Worcestershire is varied compared with the England average. About 16% (15,800) of children live in low income families. Life expectancy for women is higher than the England average.

### Health inequalities

Life expectancy is 7.7 years lower for men and 6.4 years lower for women in the most deprived areas of Worcestershire than in the least deprived areas.

### Child health

In Year 6, 18.4% (1,044) of children are classified as obese, better than the average for England. The rate of alcohol-specific hospital stays among those under 18 is 30\*, better than the average for England. This represents 35 stays per year. Levels of breastfeeding initiation are worse than the England average. Levels of teenage pregnancy and GCSE attainment are better than the England average.

### Adult health

The rate of alcohol-related harm hospital stays is 624\*, better than the average for England. This represents 3,694 stays per year. The rate of self-harm hospital stays is 190\*. This represents 1,049 stays per year. The rate of smoking related deaths is 242\*, better than the average for England. This represents 896 deaths per year. Estimated levels of adult excess weight are worse than the England average. Rates of sexually transmitted infections, people killed and seriously injured on roads and TB are better than average. The rate of violent crime is worse than average. Rates of long term unemployment and early deaths from cardiovascular diseases are better than average.

### Local priorities

Priorities in Worcestershire include mental health and wellbeing, reducing harm from alcohol, and increasing physical activity. For more information see

[www.worcestershire.gov.uk/jsna](http://www.worcestershire.gov.uk/jsna)

\* rate per 100,000 population



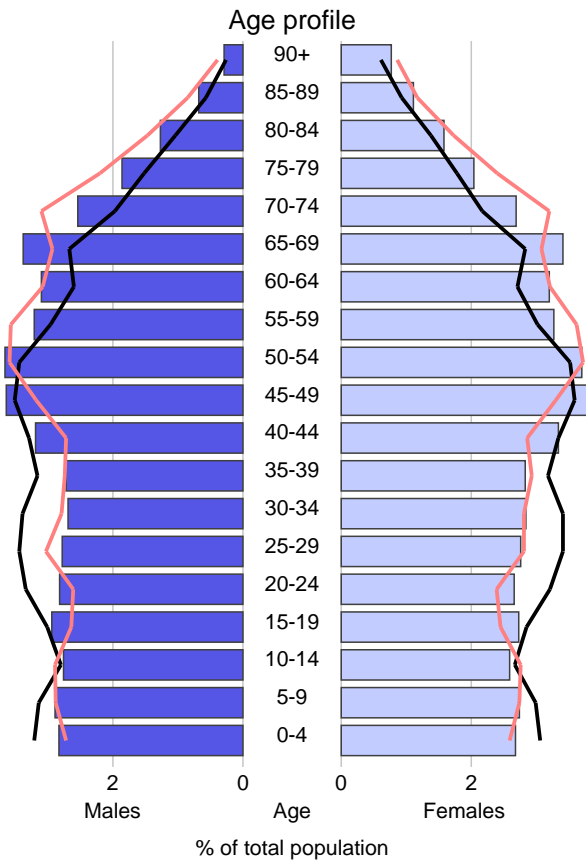
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This profile gives a picture of people's health in Worcestershire. It is designed to help local government and health services understand their community's needs, so that they can work together to improve people's health and reduce health inequalities.

Visit [www.healthprofiles.info](http://www.healthprofiles.info) for more profiles, more information and interactive maps and tools.

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# Population: summary characteristics



	Males	Females	Persons
<b>Worcestershire</b> (population in thousands)			
Population (2015):	285	294	579
Projected population (2020):	292	299	591
% people from an ethnic minority group:	2.7%	4.2%	3.5%
Dependency ratio (dependants / working population) x 100			68.1%

	Males	Females	Persons
<b>England</b> (population in thousands)			
Population (2015):	27,029	27,757	54,786
Projected population (2020):	28,157	28,706	56,862
% people from an ethnic minority group:	13.1%	13.4%	13.2%
Dependency ratio (dependants / working population) x 100			60.7%

The age profile and table present demographic information for the residents of the area and England. They include a 2014-based population projection (to 2020), the percentage of people from an ethnic minority group (Annual Population Survey, October 2014 to September 2015) and the dependency ratio.

The dependency ratio estimates the number of dependants in an area by comparing the number of people considered less likely to be working (children aged under 16 and those of state pension age or above) with the working age population. A high ratio suggests the area might want to commission a greater level of services for older or younger people than those areas with a low ratio.

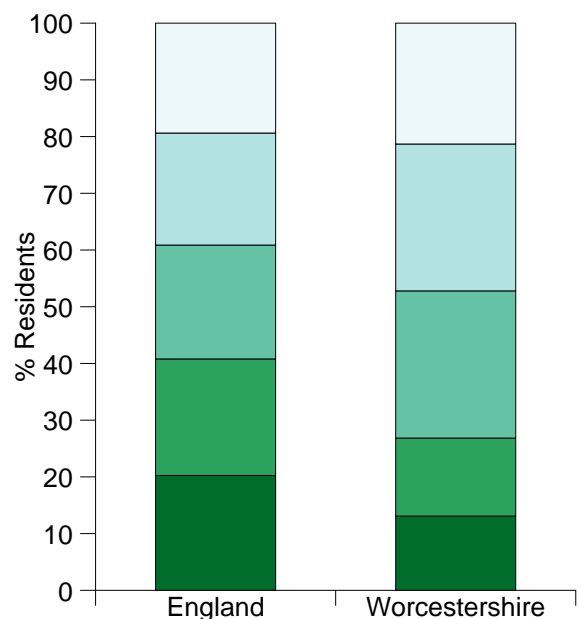
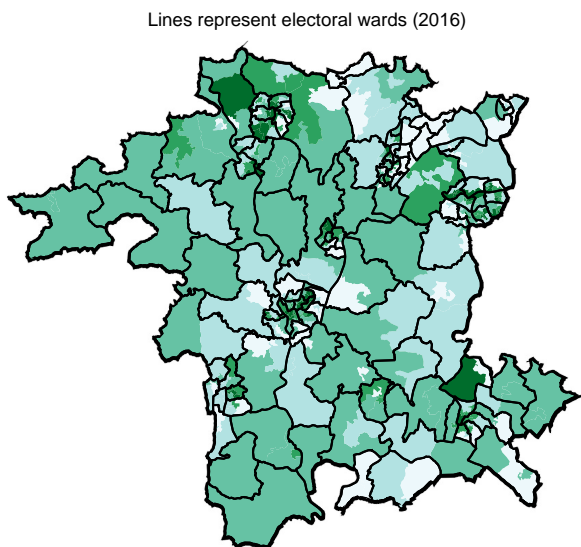
- Worcestershire 2015 (Male)
- Worcestershire 2015 (Female)
- England 2015
- Worcestershire 2020 estimate

# Deprivation: a national view

The map shows differences in deprivation in this area based on national comparisons, using national quintiles (fifths) of the Index of Multiple Deprivation 2015 (IMD 2015), shown by lower super output area. The darkest coloured areas are some of the most deprived neighbourhoods in England.

This chart shows the percentage of the population who live in areas at each level of deprivation.

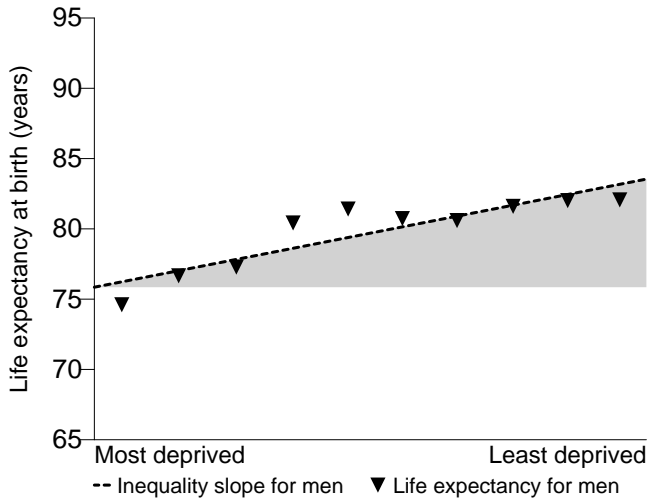
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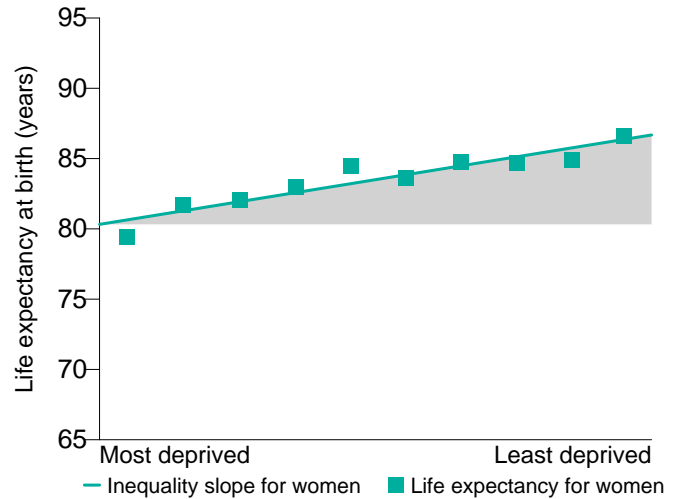
# Life expectancy: inequalities in this local authority

The charts show life expectancy for men and women in this local authority for 2013-15. The local authority is divided into local deciles (tenths) by deprivation (IMD 2015), from the most deprived decile on the left of the chart to the least deprived decile on the right. The steepness of the slope represents the inequality in life expectancy that is related to deprivation in this local area. If there was no inequality in life expectancy the line would be horizontal.

Life expectancy gap for men: 7.7 years



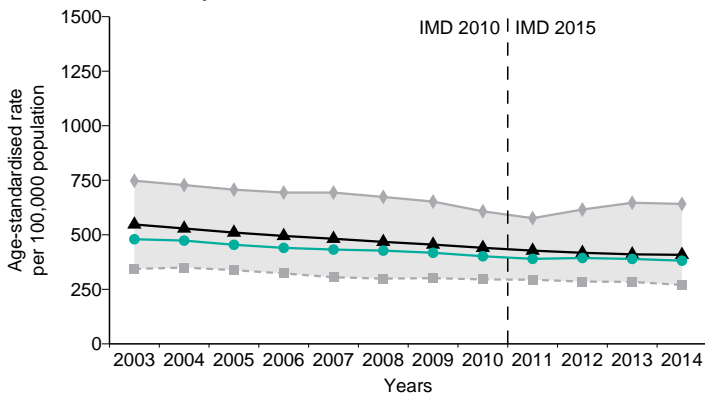
Life expectancy gap for women: 6.4 years



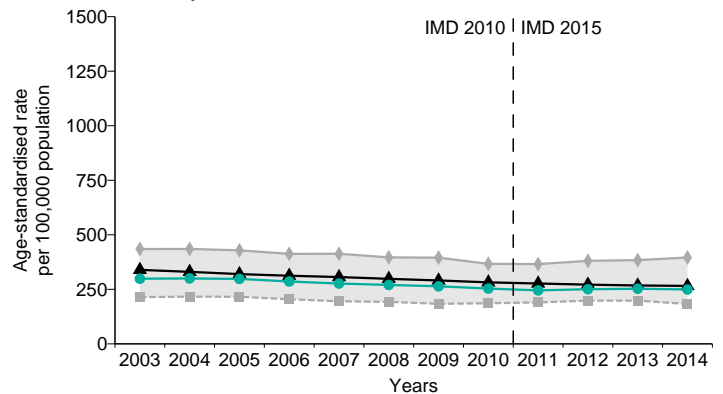
# Health inequalities: changes over time

These charts provide a comparison of the changes in death rates in people under 75 (early deaths) between this area and England. Early deaths from all causes also show the differences between the most and least deprived local quintile in this area. Data from 2010-12 onwards have been revised to use IMD 2015 to define local deprivation quintiles (fifths), all prior time points use IMD 2010. In doing this, areas are grouped into deprivation quintiles using the Index of Multiple Deprivation which most closely aligns with time period of the data. This provides a more accurate way of discriminating changes between similarly deprived areas over time.

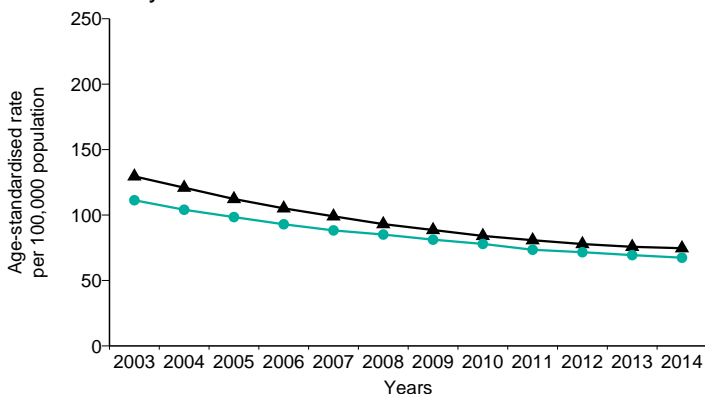
Early deaths from all causes: men



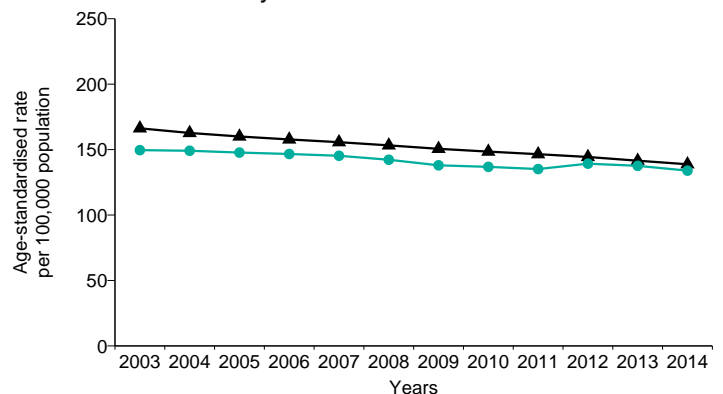
Early deaths from all causes: women



Early deaths from heart disease and stroke



Early deaths from cancer



Data points are the midpoints of three year averages of annual rates, for example 2005 represents the period 2004 to 2006. Where data are missing for local least or most deprived, the value could not be calculated as the number of cases is too small.

▲ England average ● Local average ■ Local least deprived ◆ Local most deprived ■ Local inequality



# Health summary for Worcestershire

The chart below shows how the health of people in this area compares with the rest of England. This area's result for each indicator is shown as a circle. The average rate for England is shown by the black line, which is always at the centre of the chart. The range of results for all local areas in England is shown as a grey bar. A red circle means that this area is significantly worse than England for that indicator; however, a green circle may still indicate an important public health problem.

- Significantly worse than England average
- Not significantly different from England average
- Significantly better than England average
- Not compared

Domain	Indicator	Period	Local count	Local value	Regional average <sup>€</sup>			England average		Eng best
					Eng value	Eng worst	England range	England range		
Our communities	1 Deprivation score (IMD 2015)	2015	n/a	17.7	21.8	42.0			5.7	
	2 Children in low income families (under 16s)	2014	15,810	15.9	20.1	39.2			7.0	
	3 Statutory homelessness	2015/16	209	0.9 ~ <sup>0</sup>	0.9	8.9			0.1	
	4 GCSEs achieved	2015/16	3,417	60.9	57.8	44.8			74.6	
	5 Violent crime (violence offences)	2015/16	10,701	18.6	17.2	36.7			6.7	
	6 Long term unemployment	2016	855	2.4 <sup>Λ20</sup>	3.7 <sup>Λ20</sup>	13.8			0.7	
Children's and young people's health	7 Smoking status at time of delivery	2015/16	581	10.7	10.6 \$ <sup>1</sup>	26.0			1.8	
	8 Breastfeeding initiation	2014/15	3,999	70.1	74.3	47.2			92.9	
	9 Obese children (Year 6)	2015/16	1,044	18.4	19.8	28.5			11.0	
	10 Admission episodes for alcohol-specific conditions (under 18s)†	2013/14 - 15/16	105	30.4	37.4	115.1			10.8	
	11 Under 18 conceptions	2015	157	16.3	20.8	43.8			5.7	
Adults' health and lifestyle	12 Smoking prevalence in adults	2016	n/a	13.5	15.5	24.2			7.4	
	13 Percentage of physically active adults	2015	n/a	58.3	57.0	44.8			69.8	
	14 Excess weight in adults	2013 - 15	n/a	66.6	64.8	76.2			46.5	
	15 Cancer diagnosed at early stage	2015	1,447	54.7	52.4	41.6			60.4	
Disease and poor health	16 Hospital stays for self-harm†	2015/16	1,049	190.0	196.5	635.3			55.7	
	17 Hospital stays for alcohol-related harm†	2015/16	3,694	624.4	647	1,163			390	
	18 Recorded diabetes	2014/15	33,057	6.9	6.4	8.9			3.7	
	19 Incidence of TB	2013 - 15	77	4.5	12.0	85.6			1.2	
	20 New sexually transmitted infections (STI)	2016	1,914	534.6	795	3,288			344	
	21 Hip fractures in people aged 65 and over†	2015/16	721	578.1	589	820			391	
Life expectancy and causes of death	22 Life expectancy at birth (Male)	2013 - 15	n/a	79.7	79.5	74.3			83.4	
	23 Life expectancy at birth (Female)	2013 - 15	n/a	83.5	83.1	79.4			86.4	
	24 Infant mortality	2013 - 15	86	4.8	3.9	7.9			2.0	
	25 Killed and seriously injured on roads	2013 - 15	562	32.6	38.5	74.0			11.8	
	26 Suicide rate	2013 - 15	152	10.1	10.1	17.4			5.6	
	27 Smoking related deaths	2013 - 15	2,688	242.1	283.5	509.0			183.3	
	28 Under 75 mortality rate: cardiovascular	2013 - 15	1,118	67.4	74.6	137.6			45.4	
	29 Under 75 mortality rate: cancer	2013 - 15	2,237	133.9	138.8	194.8			105.8	
	30 Excess winter deaths	Aug 2012 - Jul 2015	1,062	19.6	19.6	33.0			10.2	

## Indicator notes

1 Index of Multiple Deprivation (IMD) 2015 2 % children (under 16) in low income families 3 Eligible homeless people not in priority need, crude rate per 1,000 households 4 5 A\*-C including English & Maths, % pupils at end of key stage 4 resident in local authority 5 Recorded violence against the person crimes, crude rate per 1,000 population 6 Crude rate per 1,000 population aged 16-64 7 % of women who smoke at time of delivery 8 % of all mothers who breastfed their babies in the first 48hrs after delivery 9 % school children in Year 6 (age 10-11) 10 Persons under 18 admitted to hospital due to alcohol-specific conditions, crude rate per 100,000 population 11 Under-18 conception rate per 1,000 females aged 15 to 17 (crude rate) 12 Current smokers (aged 18 and over), Annual Population Survey 13 % adults (aged 16 and over) achieving at least 150 mins physical activity per week, Active People Survey 14 % adults (aged 16 and over) classified as overweight or obese, Active People Survey 15 Experimental statistics - % of cancers diagnosed at stage 1 or 2 16 Directly age sex standardised rate per 100,000 population 17 Admissions involving an alcohol-related primary diagnosis or an alcohol-related external cause (narrow definition), directly age standardised rate per 100,000 population 18 % people (aged 17 and over) on GP registers with a recorded diagnosis of diabetes 19 Crude rate per 100,000 population 20 All new diagnoses (excluding chlamydia under age 25), crude rate per 100,000 population aged 15 to 64 21 Directly age-sex standardised rate of emergency admissions, per 100,000 population aged 65 and over 22, 23 The average number of years a person would expect to live based on contemporary mortality rates 24 Rate of deaths in infants aged under 1 year per 1,000 live births 25 Rate per 100,000 population 26 Directly age standardised mortality rate from suicide and injury of undetermined intent per 100,000 population (aged 10 and over) 27 Directly age standardised rate per 100,000 population aged 35 and over 28 Directly age standardised rate per 100,000 population aged under 75 29 Directly age standardised rate per 100,000 population aged under 75 30 Ratio of excess winter deaths (observed winter deaths minus expected deaths based on non-winter deaths) to average non-winter deaths (three years)

† Indicator has had methodological changes so is not directly comparable with previously released values. € "Regional" refers to the former government regions.

<sup>Λ20</sup> Value based on an average of monthly counts \$<sup>1</sup> There is a data quality issue with this value ~<sup>0</sup> Aggregated from all known lower geography values

If 25% or more of areas have no data then the England range is not displayed.

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## Appendix B: The Health Impact Assessment of Minerals Local Plan

Theme	Description of Impact	How MLP is addressing this?	Potential positive or negative impact on health & wellbeing?	HIA Recommendations
Housing	<p>The required supply of houses in Worcestershire is directly reliant on the availability of minerals resources. In Worcestershire, if the housing projections contained in the City, Borough and District Councils' Local Plans are fulfilled it will mean an unprecedented increase in the number of new houses built in the County over the next 10-15 years. In total there are 37,622 new homes to be built in the 2014-30 period<sup>2</sup>.</p> <p>Housing growth if well planned can create a number of direct and indirect opportunities for health and wellbeing in the County, including:</p> <ul style="list-style-type: none"> <li>• Provision of new and an improvement to the existing infrastructure which can have a positive impact on health, such as good opportunities for active travel to support physical activity which contributes to the reduction of many related health conditions and increased general wellbeing of the population</li> <li>• Access to green space and leisure and open spaces to support social cohesion, physical activity and mental wellbeing of the residents.</li> <li>• Supply of affordable housing to reduce homelessness and provide homes for those who cannot get onto the housing ladder</li> <li>• Supporting the local economy and increasing the overall standard of living in the County which in the long term should contribute to the reduction of health inequalities</li> </ul>	<p>As part of the evidence base for the Minerals Local Plan, the 2016 Local Aggregates Assessment (LAA) sets out the amount of minerals that are likely to be required over the life of the plan to provide a steady and adequate supply of minerals, including aggregates. A Local Aggregates Assessment (LAA) will be produced annually and monitoring indicators included in the Minerals Local Plan to ensure the Plan is making provision for an adequate supply of minerals in the case of market demands changing over the life of the plan.</p>	<p>It is considered that the MLP will have overall long terms positive impact on the health and wellbeing by supporting housing growth in the County.</p>	<p>This area is sufficiently covered in the MLP. No further recommendations suggested.</p>

<sup>2</sup> Worcestershire County Council (2016) Health and Wellbeing Board Joint Strategic Needs Assessment (JSNA)

Theme	Description of Impact	How MLP is addressing this?	Potential positive or negative impact on health & wellbeing?	HIA Recommendations
	<p>It also needs to be recognised that there may be some potential risks to health and wellbeing as a result of development growth if these are completed to a low standard and not supported by the appropriate infrastructure, however it is expected that this impact will be minimised by the Local Plans policies and the scrutiny of the statutory and regulatory bodies.</p>			
<p><b>Construction / Operation</b></p>	<p>Health impacts from mining operations can be divided into two categories, immediate impacts such as accidents and accumulative and progressive impacts such as stress and pulmonary diseases. We can talk about the impact on both the employees and surrounding communities. The different types of health impacts can be classified as:</p> <ul style="list-style-type: none"> <li>- Physical - includes noise, heat, vibrations, falls and explosions, flooding and various forms of dust, aerosols and fine particles;</li> <li>- Chemical - chemical pollutants in water, solid wastes and air;</li> <li>- Mental health <ul style="list-style-type: none"> <li>o of mine workers associated with high risk working environment</li> <li>o Anxiety associated with the risks and perceived risks associated with mining activities such as loss of space, visual and physical impacts.</li> </ul> </li> </ul> <p>Any impacts, whether negative or positive will be greater in relation to vulnerable population groups and concentrations of ill health. This is why special attention should be paid to these groups when new minerals developments come forward. This includes areas of health and economic deprivation,</p>	<p>The MLP sets out a number of policies designed to ensure minerals developments do not have an adverse impact on the safety and health of nearby residents. These include specific policies for aspects such as dust, noise, land stability and water quality. Liaison groups are encouraged in the plan to ensure residents are kept up to date with plans.</p> <p>The MLP also includes a requirement for HIAs to be undertaken on new minerals developments – this will help to identify any potential health and wellbeing issues in relation to the site and offer ways of mitigating them.</p>	<p>Mineral operations which will come forward during the Plan period will generate potential health and wellbeing impacts. However, the negative impacts will be minimised with MLP policies. This is why the impact of the MLP can be considered as neutral.</p>	<p>Ensure that site specific HIAs assess the following:</p> <ul style="list-style-type: none"> <li>- Physical and chemical impacts of construction/operation period of minerals developments</li> <li>- Mental health impacts</li> <li>- Identifies vulnerable population groups and concentrations of ill health</li> <li>- Considers the surrounding communities and the mineral sites' employees and visitors.</li> </ul>

Theme	Description of Impact	How MLP is addressing this?	Potential positive or negative impact on health & wellbeing?	HIA Recommendations
	concentration of people at old age etc. This HIA will not attempt to identify any particular hotspots in Worcestershire as this analysis will only be meaningful at the site level.			Mitigation of the negative impacts and enhancement of the positive impacts should be part of the assessment.
<b>Development Design</b>	<p>The impacts of development design can be divided to: <b><u>Operation period implications.</u></b></p> <p>The siting and design of minerals sites can have temporary negative effects on surrounding communities through:</p> <ul style="list-style-type: none"> <li>- affecting visual qualities, reducing the visual attractiveness and sense of place which may affect the general wellbeing of neighbouring communities</li> <li>- affecting opportunities for physical activity through the removal of public open spaces and existing walking/cycling routes used by the residents for exercise, dog walking and leisure. This could have a number of direct and indirect health impacts including increased prevalence of obesity and related conditions, respiratory conditions, cancers and mental health.</li> <li>- affecting the quality of water resources and increasing health risks associated with the water quality as well as impacting the quality of fresh foods grown in the locality.</li> <li>- affecting the natural environment which will have indirect impacts on the health and wellbeing of the residents</li> <li>- the anticipation of likely effects that the development can have on the local community and place creating anxiety amongst the</li> </ul>	The MLP has a series of policies designed to ensure the design of a site mitigates against a range of impacts during its working phase, including both environmental and social impacts, as well as seeking to ensure sites are restored at the earliest possible opportunity to ensure the benefits of the enhancements the restorations scheme offers to the area are realised as soon as possible, this will also help reassure communities.	<p>Some negative impact through the operational period – minimised by policies but cannot be fully removed.</p> <p>Site restoration and aftercare will create significant health and wellbeing opportunities through the restoration focus on GI corridors. Additionally, the HIA policies will pick up on the health only related matters.</p>	<p>Include HIA checklist to ensure that all relevant matters are assessed and addressed during the operational and restoration periods.</p> <p>Ensure that focus is not only on reducing the negative impacts but that the restoration of minerals sites makes full use of opportunities to provide health and wellbeing enhancements.</p> <p>Para 7.39 of the Third Stage Consultation document refers to PHE Gateway which will provide a necessary "know-how" to the minerals providers. However, the MLP could refer to a HIA checklist to be prepared at the later stage. This would help to ensure that all mineral</p>

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	<p>residents, in particular those more vulnerable to change such as elderly.</p> <p><b><u>Restoration and aftercare implications</u></b></p> <p>The restoration of mineral sites offers potential for improvements of the health and wellbeing outcomes in Worcestershire. The level of these enhancements will depend on how the area will be utilised after the minerals operations have ceased. These opportunities include:</p> <ul style="list-style-type: none"> <li>• Creation of new and enhancements to the existing walking and cycling routes and linking these routes with the wider routes outside of the site – creating opportunities for physical activity</li> <li>• Creation of new green spaces, leisure trails and parks – creating opportunities for social interaction, physical activity and enjoyment of nature and calm environment for people to rest and enjoy</li> <li>• Landscape and habitat enhancements – creation of an attractive and biodiversity rich environment to support mental health and wellbeing</li> <li>• Flood alleviation and planting of trees to reduce the impact of climate change on health and wellbeing of the local residents</li> <li>• Air quality improvements</li> <li>• Creation of formal parks may result in the creation of jobs and increased economic prosperity – positive impact on health inequalities.</li> </ul>			<p>development related health considerations will be covered in any prospective HIAs. It will also provide more certainty to the industry on what they are expected to submit and limit time they need to spend identifying the relevant document on the website.</p> <p>Prepare the GI Concept plans with health and wellbeing as one of considerations to set out the design principles for these sites at the outset.</p>
<b>Active Travel and</b>	The active travel related health and wellbeing considerations generated by the minerals	The MLP has specific policies encouraging the use of	The potential improvements	Ensure that restoration policies reflect active

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<b>Connectivity</b>	<p>developments could include:</p> <ul style="list-style-type: none"> <li>- Potential disruptions of the existing walking and cycling networks which will affect the levels of physical activity amongst the local residents.</li> <li>- Creating opportunities for active travel and public transport access of the employees to the employment site. This can include the proximity of bus stops, accessibility by walking and cycling and opportunities for on-site bike storage and shower facilities.</li> </ul> <p>The restoration of mineral sites will create a number of opportunities for supporting health and wellbeing such as provision of segregated walking and cycling routes which are linked to national networks and surrounding neighbourhoods which is important in reducing obesity, mental health issues etc.</p> <p>The increased production of minerals will provide materials for the infrastructure provision.</p>	<p>sustainable transport measures both on and off site through both the operational and restoration phases of the development. These include improvements to the Public Right of Way network.</p>	<p>expected to be delivered through the restoration policies of the Minerals Local Plan in the long term will outweigh any small negative impacts associated with disruptions to the existing walking and cycling networks by the extraction of sites in the short term.</p>	<p>travel/connectivity networks. HIAs and concept plans to ensure this.</p>
<b>Healthy foods</b>	<p>Where minerals sites are going to take up agricultural land which was used or had potential to be used for crops can impact the soil quality in that location. Similarly, the sites located in place of allotments and other food growing areas may affect local food production and offer of the healthy food options including fruit and vegetables. However, it needs to be noted that these may not have direct consequences for the local people as the produce may be grown for national and international markets.</p> <p>The restoration of minerals sites offers opportunities to support the availability of healthy foods through the</p>	<p>Policy MLP20 states that minerals developments will only be permitted where it is demonstrated that soil resources and the long term potential of best and most versatile agricultural land will be conserved.</p>	<p>Potential negative impact associated with the loss of best and most versatile agricultural land however this is partially mitigated through MLP20. Some potential positive impacts as a result of the restoration of minerals sites.</p>	<p>This area is sufficiently covered in the MLP. No further recommendations suggested. The restoration opportunities to be covered through the concept planning.</p>

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	potential for creating community orchards, planting of fruit trees and other food growing areas for community benefits.			
<b>Public open space</b>	The plan should limit the loss of open/green spaces and routes used by the community. In addition, new functional spaces should be created through the restoration of sites especially in areas where this could reduce health inequalities, for example high quality open space in areas with high obesity levels. Open spaces can also have a positive impact on the mental health of the community.	Policies MLP 2 to MLP 6 set out priorities for each of the strategic corridors, including improving the network of public access routes or optimising opportunities for accessible semi-natural green space as appropriate. Policy MLP 17 also seeks improvements to public access networks and protects rights of way and accessible green space.	Positive impact through the creation of new, or improvements to existing networks or areas of public open space.	This area is sufficiently covered in the MLP. However, the adequate provision should be measured through an HIA undertaken on the proposals and it could become a consideration in the future Concept Plans.
<b>Community Safety</b>	The plan should take into account safety of workers and local communities. Necessary measures should be taken to ensure that the new development addresses any community safety issues, such as natural surveillance, as people feel happier living in safe and friendly communities.  Road safety could be ensured through a requirement for traffic routing agreements.	The Minerals Local Plan sets out a number of policies to ensure community safety, such as restricting public access from hazardous areas once the site is restored, ensuring road safety is considered in all traffic and routing arrangements for minerals movements to and from the site, and do not give rise to unacceptable hazards both on and off site.	Minerals development, if well planned, can support crime prevention and community safety, with natural surveillance of parking areas, and creating a space that is well connected, readily understood and easily navigated.	This area is sufficiently covered in the MLP. No further recommendations suggested.
<b>Employment and Economy</b>	Minerals development supports new jobs and general economic prosperity both directly as an employer, and also by supplying minerals for housing and infrastructure provision. Well delivered after use creating an attractive environment can in turn lead to a happier local community, who support the economy through increased productivity. This would help to reduce deprivation in the surrounding area, as well as	The Minerals Local Plan sets out to provide a steady and adequate supply of minerals into the economy, supporting Worcestershire's growth and the wealth of the region and its residents. It will contribute towards Worcestershire's housing	Minerals development can have a positive impact on the economy through the creation of new jobs both in the minerals industry, and through providing the	This area is sufficiently covered in the MLP. No further recommendations suggested.

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	<p>health inequalities.</p> <p>If not well managed, minerals development could have negative impacts on surrounding business such as through noise or dust nuisance.</p>	<p>and infrastructure provision, as well as through the restoration of minerals sites to create an attractive environment in Worcestershire.</p> <p>Policy MLP 16 protects against unacceptable impacts on the health or quality of life of residents, businesses and other sensitive receptors, including issues such as noise and dust.</p>	<p>necessary minerals for other industries to thrive.</p> <p>Some negative impact through the operational period – minimised by policies.</p>	
<b>Equality and social cohesion</b>	<p>Both social interaction and the way people feel treated have an impact on how an individual feels about themselves and consequently has an impact on their overall health and well-being. The after use of minerals sites must take steps to ensure it promotes community cohesion and provides community benefits accessible to the whole community. The design of sites could address health inequalities.</p>	<p>Policy MLP17 sets out that publically accessible green space made through minerals restoration, including Public Rights of Way should be accessible and engaging for all members of society, including those with disabilities.</p> <p>Furthermore it aims to ensure all members of the community feel engaged through the use of minerals liaison groups to keep the residents informed on the development throughout its life.</p>	<p>The plan will have an overall positive impact on equality and social cohesion through the creation of public open space that is accessible for all members of the community.</p>	<p>Provide tools which will allow delivering this objective at the site level. This should be measured through an HIA undertaken on the proposals and it could become a consideration in the future Concept Plans.</p>
<b>Climate change</b>	<p>Any new development has the potential to increase the risks associated with climate change related events such as flooding. There are, however, also opportunities for new environments to mitigate against and adapt to, some of these effects.</p> <p>Climate change related extreme weather events could affect the health and well-being of future site residents, neighbouring communities and the wider</p>	<p>The Minerals Local Plan seeks to ensure all minerals developments are both resilient to, and take steps to mitigate the effects of, climate change. Policy MLP 15 sets out that all developments should be resilient to climate change including avoiding both contributing to the causes of</p>	<p>Small positive impact through mitigation against certain aspects of climate change through restoration schemes such as those that return rivers to their natural patterns of</p>	<p>This area is sufficiently covered in the MLP. No further recommendations suggested. Potential site level mitigation measures to be identified through HIAs. The restoration opportunities to be covered through the</p>



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	<p>population.</p> <p>Possible measures that could be implemented include; Sustainable Drainage Systems, water and air quality betterment, biodiversity enhancements, protection of best and most versatile agricultural land, and the implementation of sustainable transport.</p>	<p>climate change, and being vulnerable to the range of impacts arising from climate change. MLP 2-6 – identify priorities for biodiversity, water environment and agriculture that should contribute to climate change resilience and mitigation. MLP 15 is the overarching requirement to be resilient to climate change. MLP 18 requires optimising biodiversity gain by enhancing, linking and extending existing habitat networks. MLP 20 requires protection of soil quality and avoiding damaging the long term potential of best and most versatile agricultural land. MLP 22 requires gains for the water environment, avoiding increasing flood risk, avoiding harm to the water environment. MLP 24 requires opportunities for the use of alternatives to road transport</p>	<p>flooding or provide water storage.</p>	<p>concept planning process.</p>
<b>Environmental Hazards</b>	<p>Air quality – New developments can have a cumulative impact on the air quality of the local area. Mitigation measures can be introduced during the working phase of a site to help limit these effects. By promoting sustainable transport and energy efficiency in the design of the after use of the site, the impact of air quality changes can be mitigated against, or provide an area of high quality air for public access</p>	<p>MLP15 seeks to ensure developments do not give rise to unacceptable hazards, these include land instability, subsidence, and aviation safety. In addition, hazards such as air quality, dust, odour, noise, vibration, light and visual impact</p>	<p>The plan will have a neutral impact on Environmental Hazards by ensuring mineral working avoids causing these hazards.</p>	<p>This area is sufficiently covered in the MLP. No further recommendations suggested.</p>

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	<p>purposes, increasing the health of the local community. The impact will be greater for the more vulnerable groups of population including elderly.</p> <p>Noise – Sites may create additional noise particularly during the working phase but also after restoration. Any new developments should be sensitive to the prevailing acoustic environment.</p> <p>Flooding – Developments must mitigate against detrimentally affecting flooding both on site and downstream, and provide betterment wherever possible. This helps ensure the development will not have a detrimental impact on the health of local communities through flooding.</p> <p>Land stability – Developments must ensure they will have no detrimental impact on land stability both during the working phase and in its after-use.</p>	<p>are all dealt with in policy MLP16, and flood risk is addressed in policy MLP 22.</p>		
<b>Impact on Services</b>	<p>Developments can have impacts on service provision, through extra demand on water, electricity and gas supplies, and also through increased pressure on public services such as education, healthcare and retail. Increasing the pressure on services, and therefore the competition to make use of the services, can cause significant health impacts on the local community through added stress for example.</p>	<p>MLP15 ensures mineral working avoids causing harm to utility services that cross, abut or are adjacent to the proposed development site.</p>	<p>The plan will have a neutral impact on these services by ensuring they continue to operate without interference.</p>	<p>This area is sufficiently covered in the MLP. No further recommendations suggested.</p>