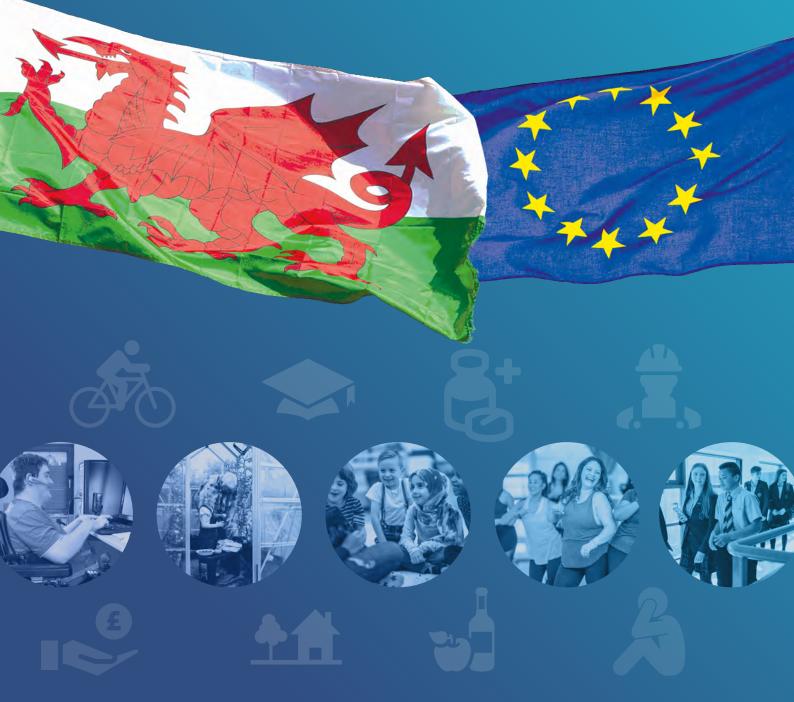




The Public Health Implications of Brexit in Wales: A Health Impact Assessment Approach

Executive Summary



Authors

Liz Greenⁱ, Nerys Edmondsⁱ, Laura Morganⁱ, Rachel Andrewⁱⁱ, Malcolm Wardⁱⁱ, Sumina Azamⁱⁱ, and Mark A. Bellisⁱⁱ.

This Health Impact Assessment is in three parts:

- 1. The Public Health Implications of Brexit in Wales: A Health Impact Assessment Approach. Executive Summary (this document)
- 2. The Public Health Implications of Brexit in Wales: A Health Impact Assessment Approach. Main Findings
- 3. The Public Health Implications of Brexit in Wales: A Health Impact Assessment Approach. Technical Report
 - a. Technical Report: Part 1
 - b. Technical Report: Part 2

This Health Impact Assessment (HIA) has been undertaken at a time of ongoing uncertainty and a rapidly evolving Brexit agenda. The HIA will continue to be reviewed and monitored post publication to reflect changing context, evidence and events, and where possible updated.

Suggested citation:

Green L, Edmonds N, Morgan L, Andrew R, Ward M, Azam S and Bellis MA. (2019). The Public Health Implications of Brexit in Wales: A Health Impact Assessment Approach. Executive Summary. Cardiff, Public Health Wales NHS Trust.

ISBN 978-1-78986-043-6

© 2019 Public Health Wales NHS Trust.

Material contained in this document may be reproduced under the terms of the Open Government Licence (OGL) www.nationalarchives.gov.uk/doc/open-government-licence/version/3/

provided it is done so accurately and is not used in a misleading context.

Acknowledgement to Public Health Wales NHS Trust to be stated.

Copyright in the typographical arrangement, design and layout belongs to Public Health Wales NHS Trust.

Acknowledgments

The authors would like to thank all the individuals and organisations who have generously contributed their time and expertise to support this Health Impact Assessment (HIA).

HIA Working Group

- Rachel Andrew[®]
- Nerys Edmondsⁱ
- Liz Greenⁱ
- Amy Hookway^{iv}
- Ed Huckle[®], Public Health England
- Laura Morganⁱ
- Malcolm Wardⁱⁱ
- Angharad Wooldridgeⁱ

HIA Strategic Advisory Group

- Rachel Andrewⁱⁱ
- Sumina Azamⁱⁱ
- Nick Batey, Welsh Government
- Huw Bruntⁱⁱⁱ
- Jo Charles, Betsi Cadwaldr University Health Board Public Health Team, Public Health Wales
- Nerys Edmondsⁱ
- Eva Elliott, Cardiff University
- Liz Greenⁱ
- Katie Hirono, President of the Society of Practitioners of Health Impact Assessment (SOPHIA) / Edinburgh University
- Chrishan Kamalan, Welsh Government
- Laura Morganⁱ
- Alice Teague, Food Standards Agency
- Malcolm Wardⁱⁱ

The authors would also like to thank the following for their input:

Adam Jones", Sara Wood", Sarah James", Sian King^{iv}, Louisa Petchey", Richard Lewis", Sian Price^{iv}, Stephen Monaghan^v, Alisha Davies", Mariana Dyakova^{II}, Lee Parry Williamsⁱ and Hayley Jenney.

ⁱ Wales Health Impact Assessment Support Unit, Public Health Wales

[®] Policy, Research and International Development Directorate, Public Health Wales

^{III} Public Health Services Directorate, Public Health Wales

^{iv} Health and Well-being Directorate, Public Health Wales

^v NHS Quality Improvement & Patient Safety Directorate, Public Health Wales

Setting the scene

The United Kingdom's withdrawal from the European Union (EU) (informally referred to as "Brexit") is an unprecedented event in UK history, and evidence of the impact of Brexit on a wide range of policy areas is either unknown or highly contested. The Wales Health Impact Assessment Support Unit, Public Health Wales, has carried out a Health Impact Assessment (HIA) to better understand the potential implications of Brexit for future health and well-being in Wales. HIA is an evidence based systematic, flexible process, which supports organisations to assess the potential consequences of their decisions, policies, plans or proposals on population health and well-being. This report focuses on the distinct Welsh political, social, cultural and economic context and aims to support and enable key stakeholders to plan for and respond to Brexit.

In order to provide timely evidence, the HIA was undertaken in a tight timescale over a six month period (July to December 2018) and is based on evidence available to the end of this period. It is a 'snapshot' of the impacts of Brexit for Wales at a particular point in time and is set against the ever changing and evolving environment leading up to the anticipated withdrawal process. It is a time of intense political activity with journal papers, stakeholder opinion reports and plans being published on an almost daily basis, with more likely to become available in the lead up to 29th March 2019. As a result, there is limited evidence on the precise actual impacts of any Brexit scenario. Therefore this HIA has not appraised specific Brexit scenarios (for example 'soft' versus 'hard' Brexit) but has focused primarily on the potential impacts for the Welsh population of the UK leaving the existing framework of the EU.

The exact impacts of the UK leaving the EU are unknown. These will only become clear over coming years and consequently, this report examines the spectrum of potential impacts as well as drawing on information describing impacts identified since the referendum. The scale and complexity of the impacts of Brexit means that the HIA has focused on the major potential direct and indirect impacts. However, it is recognised that there may be other impacts that are, as yet, unidentified and which may ultimately be of equal significance to health and well-being. Any assumptions contained in the evidence used within this report have been accompanied by a rationale for their inclusion.

The HIA has captured the best available evidence utilising qualitative and quantitative sources from literature (both academic and 'grey'), expert knowledge and health intelligence. Literature has been identified through a robust research protocol (with clear inclusion and exclusion criteria), with greater weight given to peer reviewed evidence. Where expert knowledge has been the only source available to the authors, this has been clearly stated. The authors have identified limitations within the report. It is recognised that assessing and responding to the impacts of Brexit is a work in progress. However, during the HIA process, the authors have endeavoured to ensure that the latest evidence is included, with amendments made where possible up to publication.

It is hoped that this HIA will be a useful resource for organisations to rapidly identify the wide-ranging nature of the impacts which may be relevant to them, as well as the breadth of population groups who may be affected in Wales when the UK exits the EU. It is evident that further work may be required as future developments may alter the impacts identified in this report and their implications for health and well-being. Therefore, this HIA will continue to be reviewed and monitored to reflect changing contexts, evidence and events.

1 Introduction

The withdrawal of the United Kingdom (UK) from the European Union (EU) (informally referred to as 'Brexit') is recognised by Public Health Wales (PHW) as a major policy change which has the potential to impact on the health and well-being of current and future generations in Wales.

Public Health Wales has a leading role in enabling and mobilising others to improve health and well-being. For example, it makes information about matters related to the protection and improvement of health in Wales available to the public and both undertakes and commissions research into such matters. As a public body, PHW also has a duty under the Well-being of Future Generations Act (Wales) 2015 to promote sustainable development and take a long term, preventative, collaborative, and integrated approach to population health that involves key stakeholders.

As part of these responsibilities, the Wales Health Impact Assessment Support Unit (WHIASU) within PHW has carried out a Health Impact Assessment (HIA) of the public health implications of Brexit in the short, medium and long term. This aims to support organisations (across sectors) and decision makers in Wales, inform the overarching policy making environment to ensure that any opportunities for health gain as a result of Brexit are maximised and any potential negative impacts or unintended consequences are prevented or mitigated, and to inform the development of PHW's future strategic plans.

This HIA is a unique analysis, which assesses Brexit from a Welsh perspective using the public health "lens" of the social determinants of health and population health and well-being. The degree of uncertainty and the rapidly evolving nature of the withdrawal arrangements and future trade agreements mean that it has not been possible to evaluate in detail specific Brexit scenarios. Therefore, the HIA focuses in general terms on the potential opportunities and risks to health and well-being in Wales of the UK leaving the EU; although there is recognition that the nature and scale of these may change depending on the Brexit process. Assessing and responding to the impacts of Brexit is a work in progress and this HIA will continue to be reviewed and monitored to reflect changing contexts, evidence and events.

This HIA consists of an Executive Summary (this document), a Main Findings report and an accompanying Technical Report (in two parts), which provide further information on the methodology used, as well as the full evidence on which the findings of the HIA are based.

Referendum on the	hited Kingdom's		
Referendum on the membership of the	Union Union		
membership of the	Luropean		
Inclus	in the box	JEXT IO	
Note only once by pu	tting a cross 🗶 in the box i		
your choice			
your chere	in a member 0	fthe	- Andrew
Dhauld the United K	ingdom remain a member o eave the European Union?		
Should the Union or	eave the European		
European			
	ber of the European Unior		
Remain a mem	ber of the		
	Leave the European Unio	n	
	Leave the Europ		

2 Aim

The aim of this HIA is to identify and assess the extent and nature of key potential health and well-being impacts of Brexit in Wales - whether physical, mental or social. This includes an assessment of whether these impacts are positive or negative, the main population groups affected, and if there are any unintended consequences or 'gaps' in plans, proposals or policies in preparation for, or in response to Brexit. The HIA will also identify areas for future action. The intended audience is wide ranging and includes multidisciplinary stakeholders from the public, private and third sectors.

3 Health Impact Assessment

An assessment of the potential health and well-being impacts of a policy can be a useful and informative process. This can help support policy makers and stakeholders to make robust, evidence based decisions and take appropriate action. HIA is currently not statutory in the UK but will become so in Wales as part of the implementation of the Public Health (Wales) Act 2017. This HIA is a unique analysis which demonstrates PHW's leadership for HIA and its commitment to carrying out the process as part of the forthcoming HIA statutory duty, and also supports the implementation of the Well-being of the Future Generations (2015) Act. HIA is an evidence based systematic, flexible process, which supports organisations to assess the potential consequences of their decisions, policies, plans or proposals on population health and well-being.

This HIA on the public health implications of Brexit is based on a breadth of evidence – both quantitative and qualitative, drawn from peer reviewed literature, grey literature, health intelligence and other demographic data, a participatory stakeholder workshop and interviews with twenty-five experts. This evidence has been collated, synthesised and analysed to identify key themes and potential areas of impact. A Strategic Advisory Group with representatives from key sectors and stakeholders (see Acknowledgements) has informed the HIA methodology and development of this report (Box 1). A full description of the methodology can be found in the accompanying Technical Report (Part 1, section 3).

Box 1. HIA Process

- 1. Screening: does the proposal or plan have an impact on population health?
- 2. **Scoping:** what resources, timeframes, policy windows, evidence needs to be considered? Does a Steering Group need to be established? Roles and responsibilities of any Steering Group
- **3. Appraisal / Assessment of evidence:** triangulation of qualitative and quantitative evidence and health intelligence
- 4. **Reporting and recommendations:** construction of HIA report and any non-technical summary
- 5. **Review and reflection:** including monitoring and evaluation did the HIA and any findings have an impact on health and well-being or decision making process?

4 Key Policy Mechanisms

The HIA identifies key policy pathways and mechanisms through which Brexit directly and indirectly affects the determinants of health (social, economic and physical environment and individual behaviours), population groups and therefore, health and well-being. Whilst some of these policy areas are devolved to Wales, significant levers for future health and well-being, for example, justice, immigration and foreign affairs are reserved to UK Government. The key policy mechanisms through which Brexit could have a **direct** impact on health in Wales are (in no particular order of importance):

- Changing regulatory standards and legal frameworks (devolved and non-devolved)
- Terms of future trade policy and trade agreements (devolved and non-devolved)
- End of freedom of movement and changes to immigration policies (non-devolved)
- UK citizens will no longer be EU citizens (non-devolved)
- Loss of jurisdiction of the European Court of Justice (non-devolved)
- Reduced access to key coordinating public health systems (devolved and non-devolved) e.g. European Centre for Disease Prevention and Control, European Medicines Agency
- Reduced access to data, intelligence and evidence sharing mechanisms (devolved and non-devolved)
- Reduced access to EU funding (devolved and non-devolved)
- The loss of jurisdiction of the EU Charter of Fundamental Rights in the UK (nondevolved)
- Rights of EU Nationals to live and work in the UK (non-devolved)
- Leaving the single market and / or customs union (non-devolved)
- Regulatory divergence increasing customs requirements at borders (non-devolved)

Mechanisms for potential **indirect** impacts of Brexit on health have been identified (in no particular order of importance):

- Economic decline, inflation and linked reduction in funding for the public sector, infrastructure and key community assets
- Increased uncertainty over the future
- Increase in hate crime
- Increased political engagement and participation

At the time of writing, a number of options are being explored in the public domain in terms of the nature of the withdrawal agreement including "soft Brexit", "hard Brexit" and "no deal" (See Glossary in main report). This, together with the high degree of uncertainty, means that it has not been possible to evaluate each specific scenario and there may be further policy mechanisms for direct and indirect impacts that are not captured in this HIA.

5 Key Findings

This section describes the main findings of the HIA in relation to population health and wellbeing impacts of Brexit. This is based on a range of evidence:

- Health intelligence (see Technical Report: Part 2, Community Health Profile)
- Critically appraised literature (see Technical Report: Part 1, Section 5)
- And stakeholder evidence (see Technical Report: Part 1, Section 4)

This has been collated, triangulated, synthesised and analysed. Further information on the methodology can be found in the Main Findings report, Section 2 and the accompanying Technical Report: Part 1, Section 3. A full description of the findings from the appraisal of the evidence can be found in Section 4 of the Main Findings Report and the Technical Report: Part 2.

From this evidence base, the authors have drawn a number of key findings (listed below).

- 1. The direct impacts on the determinants of health
- 2. The population groups impacted
- 3. The indirect impact on mental well-being
- 4. The policy context in Wales
- 5. Trade and trade agreements as a key determinant of health



Terminology

The HIA uses specific terminology to describe the impact, using the following descriptors throughout:

	Type of	impact	
Positive	/ opportunity	Negative	
	sidered to improve health an opportunity to do so	Impacts that are consider health statu	
	Likelihood	of impact	
Confirmed		from a wide range of sources dy happened or will happen	Confirmed
Probable		an not. Direct evidence but ted sources	Probable
Possible		Plausible, but with limited to support	Possible
	Intensity / sev	erity of impact	
Major		ality or extent. Significant or orthy of attention, noteworthy	Мајог
Moderate	Average in intensi	ity, quality or degree	Moderate
Minimal	Of a minimum amount, qu	uantity or degree, negligible	Minimal
	Duration	of impact	
Short term (S)	Impact seer	n in 0 – 3 years	Short term (S)
Medium term (M)	Impact seen	in 3 – 10 years	Medium term (M)
Long term (L)	Impact see	n in >10 years	Long term (L)

In this section (and throughout the report), Brexit impacts are described as potentially 'negative' and / or as 'positive / opportunity'. **'Negative'** is used when the evidence indicates there could be negative impacts on the health and well-being determinants, for example food safety and supply (Table 1), or specific population groups for example non UK EU citizens living in the UK (Table 2). Where potential negative impacts are identified, policy interventions and actions could be put in place to mitigate or prevent negative impacts. The term 'positive / opportunity' is used to describe a potential beneficial impact of Brexit on health and well-being determinants or population groups and is based on the premise that policy interventions or action would be taken to maximise positive impacts or opportunities. For many determinants of health and population groups, both positive and negative impacts have been identified. For example, a negative confirmed major impact over the short to medium term has been identified for healthcare staffing, linked to changes and uncertainty in immigration rules, ending of freedom of movement, and cross border qualifications recognition. A possible moderate long-term positive impact / opportunity has been identified to train more UK nationals to work in healthcare. This will require prioritisation of policies, plans and actions to train, recruit and retain more UK national staff. Of note, the impacts will vary according to the specific population group(s) affected or the final terms of a Brexit agreement. This detailed information can be found in Section 4 of the Main Findings report and Part 2 of the Technical Report.

of detail of the Main Findings report. Table 1 signposts the reader to the relevant sections in the Main Findings report where the full appraisal of evidence to describe the potential nature, direction, findings summarised in the table below do not provide the level Due to the breadth and complexity of potential impacts, the

the relevant sections in the Main Findings report in order to avoid strongly recommended that this table is read in conjunction with likelihood, intensity and duration of impact can be found. It is misinterpretation and to fully understand the analysis.

Key Finding 1: Direct impacts on the determinants of health

Table 1 summarises the key impacts of Brexit in Wales on the determinants of health and well-being, based on current evidence and before any mitigation is put in place.

Table 1: Key im	Table 1: Key impacts of Brexit in Wales on the	in Wales o		determinants of health	of health			
Determinant of health and well-being	Direct impact Positive / oppor	Positive /	opportunity		Negative			Rationale
		Likelihood Intensity	Intensity	Duration	Likelihood Intensity	Intensity	Duration	
		Confirmed	Major	Short	Confirmed Major	Major	Short	
		Probable	Moderate	Medium	Probable	Moderate	Medium	
		Possible	Minimal	Long	Possible	Minimal	Long	
Access to healthy, safe and affordable food	Food safety system				Probable	Major	Short-Med	 Short-Med Negative: the food safety system in the UK is highly exposed to Brexit related change and uncertainty and requires major capacity building in relation to legislation, organisations, policies, and workforce in a very short timescale. See Section 4.2.1 in Main Report for full analysis.

Positive: opportunity to introduce tighter regulation and legislation. Negative: loss of EU food safety legislation and the need to replace this at pace. See Section 4.2.1 in Main Report for full analysis.		Positive: opportunity for more sustainable food production in Wales. See Section 4.2.1 in Main Report for full analysis.	Negative: workforce challenges in the agriculture sector, customs and tariff changes, and changing regulations. Negative impact is probable in a "no deal" scenario. See Section 4.2.1 in Main Report for full analysis.	Short-Med Negative: Any increase in inflation or reduced economic growth impacting on affordability of food and incomes. Cumulative impact with welfare reform and rising food bank use in Wales. See Section 4.2.1 in Main Report for full analysis.
Long	Med-Long		Short	Short
Moderate	Major		Major	Major
Possible	Possible		Possible	Probable
Long	Med-Long	Long		
Moderate	Major	Moderate		
Possible	Possible	Possible		
Food safety regulation	Food standards	Sustainable food production	Food supply	Cost of food
Access to healthy, safe and affordable food (continued)			- · · ·	

Alcohol	Alcohol consumption patterns	Possible	Moderate	Short- Med-Long	Possible (increase)	Moderate	Short- Med-Long	Positive: decreased consumption following income reduction or increase in price.
								Negative: increased consumption due to stress.
								See Section 4.2.2 in Main Report for full analysis.
	Alcohol regulation	Possible	Moderate	Med-Long	Possible	Moderate	Med-Long	Positive or negative as a result of strengthened or weakened regulatory mechanisms in new trade agreements or legislation.
								See Section 4.2.2 in Main Report for full analysis.
Tobacco	Use of tobacco	Possible	Moderate	Short- Med-Long	Possible (increase)	Moderate	Short- Med-Long	Positive: reduced smoking as a result of income reduction or increase in price.
								Negative: increased smoking as a result of stress.
								See Section 4.2.3 in Main Report for full analysis.
	Tobacco regulation	Possible	Moderate	Med-Long	Possible	Moderate	Med-Long	Positive or negative impact due to strengthened or weakened regulatory mechanisms in new trade agreements
								or registation. See Section 4.2.3 in Main Report for full analysis.
Human rights	Loss of application of the EU Charter				Possible	Moderate	Med-Long	Negative: loss of social, workplace and equality rights protections, currently not fully recognised in UK law.
	of Fundamental Rights in UK							See Section 4.2.4 in Main Report for full analysis.
Environmental regulations	Regulations e.g. air quality, bathing water	Possible	Major	Med-Long	Possible	Major	Med-Long	Positive or negative impact due to strengthened or weakened future policy or as a result of trade agreements.
	quality							See Section 4.2.5 in Main Report for full analysis.

Economic conditions: employment and skills	Workforce challenges in sectors linked to health and well- being				Confirmed Major	Major	Short- Med-Long	Negative: Sectors particularly dependent on skills from the EEA in Wales include the veterinary sector, the food and drink manufacturing industry, and health and social care. Significant number of academic staff in Welsh universities are from the EU / EEA. Proposed immigration and freedom of movement changes linked to Brexit pose challenges to future retention and recruitment. See Section 4.2.6 in Main Report for full analvsis
	Potential to attract skilled workers into key sectors to Wales from within the UK and non-EU nations	Possible	Moderate	Long				Positive: provision of attractive working and living conditions in Wales, opportunity to develop skills of UK workforce. See Section 4.2.6 in Main Report for full analysis
	Job security in sectors linked to exports / imports and exposure to changes in tariff and non-tariff barriers				Probable	Major	Short- Med-Long	Negative: Manufacturing plays a greater part in the Welsh economy than elsewhere in the UK and the principal market for Welsh manufacturers is the EU. Any tariff changes, reduction in business investment and reduced economic growth poses risks to job security. See Section 4.2.6 in Main Report for full analysis

Positive: increased opportunity for accessing training and employment opportunities and developing the skills base in Wales. Negative: uncertainty regarding replacement of the EU Funds that have supported skills and educational opportunities. See Section 4.2.6 in Main Report for full analysis.	Positive: potential for increase in job vacancies, however, skills and demographic factors may mean that not all vacancies can be easily filled. (Available jobs may not all be quality employment / "good work" that benefits health). See Section 4.2.6 in Main Report for full analysis.
Med-Long	
Moderate	
Probable	
Long	Short- Med-Long
Moderate	Minimal
Possible	Possible
Skills and employability	Job availability / vacancies

 Med-Long Positive: opportunity to develop a new model and level of funding to meet the needs of the Welsh population. Negative: uncertainty regarding replacement of the EU Funds that have provided regional investment and been aimed at reducing regional inequalities. See Section 4.2.7 in Main Report for full analysis. 	 Short-Med Positive: opportunity to shape and tailor agricultural policy in Wales. Negative: major changes in policy and payments framework, affecting farmers, landowners and rural communities and resulting in considerable uncertainty. See Section 4.2.7 in Main Report for full analysis. 	 Med-Long Negative: reduced access to EU Research and Development funding streams, and loss of collaboration opportunities. See Section 4.2.7 in Main Report for full analysis and Section 4.2.9 for health care related research. 	 Med-Long Positive: potential for future policy to transfer / strengthen worker's rights in Wales. Negative: loss of key protective EU legislation for workers' rights. Future policy and trade agreements could have positive or negative impacts. See Section 4.2.8 in Main Report for full analysis
Major	Major	Major	Major
Probable	Confirmed	Confirmed	Possible
Med-Long	Med-Long		Med-Long
Moderate	Major		Major
Possible	Probable		Possible
Community, economic and infrastructure investment for addressing inequalities	Agricultural and land management policy / funding	Research and development funding for health related technologies and treatments	Including: health and safety, workers' rights and equality, working hours
Economic conditions: EU Funding			Working conditions

Positive: opportunity to train more UK nationals to work in health care. Negative: recruitment, retention and recognition of qualifications challenges in NHS linked to Brexit, create cumulative impact on staffing with the existing demands on the sector. See Section 4.2.9 in Main Report for full analysis.	Positive: opportunity for development in the UK pharmaceutical sector, increasing UK based manufacturing, opportunity to seek other international collaborations. Negative: disrupted medicine and consumables supply chains, reduced access to, or exclusion from EU trials, changes to regulations, and uncertainty on long-term participation in key regulatory and oversight agencies such as EMA, ECJ. See Section 4.2.9 in Main Report for full analysis.	Negative: loss of intelligence (surveillance and monitoring) and co- ordinated response to cross border health threats. See Section 4.2.9 in Main Report for full analysis.	Negative: uncertainty on reciprocal health care in "no deal" scenario or beyond any transition period. See Section 4.2.9 in Main Report for full analysis.
Short-Med	Short-Med	Short-Med	Short-Med
Major	Major	Moderate	Major
Confirmed	Probable	Probable	Probable
Long	Long		
e	Moderate		
Possible	Possible		
Health care staffing	Access to medicines, medical devices and clinical trials	Health protection / health security	Reciprocal (cross-border) health care
Access to safe and timely health and social care services			

Access to safe and timely health and social care services (continued)	Rare diseases	Probable	Minimal*	Short-Med	 Short-Med Negative: potential for reduced access or exclusion from European rare disease networks involving loss of intelligence and evidence sharing, impact on rapid access to diagnosis and new treatments. See Section 4.2.9 in Main Report for full analysis.
	Social care staffing	Probable	Major	Short-Med	Negative: In Wales, the number of EU citizens working in social care has grown by 56% since 2011 whilst numbers of non-EU nationals has fallen. Proposed immigration and freedom of movement changes linked to Brexit pose challenges to future recruitment and will have a cumulative impact on existing sector workforce capacity and demographic challenges. See Section 4.2.9 in Main Report for full analysis.
*This impact is mir	*This impact is minimal at population level, but for individuals with rare disease it would be major.	ase it would	be major.		



In terms of the determinants of health and well-being, the analysis of impact shows that nearly all potential **positive** impacts / **opportunities** are classified as 'possible', that is they may plausibly happen but there is limited evidence to support this. A 'probable' positive impact (more likely to happen than not) has been identified for agricultural and land management policy / funding, on the basis of new opportunities to shape and tailor agriculture policy in Wales. Analysis indicates that the majority of potential positive impacts / opportunities are expected to have a moderate degree of impact over a medium to long term (impact seen over more than 3 years) or in the long term (over 10 years). Examples of areas where no positive impacts have been identified include food supply, cost of food, job security, research and development funding for health technologies and treatments, and reciprocal (cross-border) health care.

The majority of potential **negative** impacts identified are classified as having either a moderate or major impact and over half are estimated to have either a probable or confirmed impact. There are seven areas identified as having a probable major impact: food safety systems; cost of food; job security in sectors linked to exports / imports and exposures to changes in tariff and non-tariff barriers; EU funding for community, economic infrastructure for addressing inequalities; access to medicines, medical devices and clinical trials; reciprocal (cross-border) health care; and social care staffing. Of note, there are four areas identified as having a confirmed major impact: workforce challenges in sectors linked to health and well-being; EU agricultural and land management policy / funding; EU research and development funding for health related technologies and treatments; and recruitment and retention of health care staff.

It is recognised that as the Brexit process continues and evolves, the impacts identified in the table may change or there may be other impacts that are, as yet, unidentified and which may ultimately be of equal significance to health and well-being.

of detail of the Main Findings report. Table 2 signposts the reader to the relevant sections in the Main Findings report where the full appraisal of evidence to describe the potential nature, direction, findings summarised in the table below do not provide the level Due to the breadth and complexity of potential impacts, the

the relevant sections in the Main Findings report in order to avoid strongly recommended that this table is read in conjunction with likelihood, intensity and duration of impact can be found. It is misinterpretation and to fully understand the analysis.

Key Finding 2: Key Population groups impacted

and social care). Table 2 provides an analysis of the impact on population groups in Wales who are expected to be particularly affected by Brexit. The impacts of Brexit can either affect: the whole population (for example, through food supply, environmental regulations); large sections of the population (for example through working conditions); or key vulnerable population groups (for example children, people in need of health

Table 2: Summ	Table 2: Summary of the main population groups in Wales that are anticipated to be affected by Brexit	pulation g	Jroups in V	Wales that	are antici	pated to b	e affecte	1 by Brexit
Determinant of health and well-being	Direct impact	Positive /	Positive / opportunity	<i>λ</i> ,	Negative			Rationale
		Likelihood Intensity	Intensity	Duration	Likelihood Intensity	Intensity	Duration	
		Confirmed Major	Major	Short	Confirmed Major	Major	Short	
		Probable	Moderate	Medium	Probable	Moderate	Medium	
		Possible	Minimal	Long	Possible	Minimal	Long	
Sex and gender related groups	Women (in relation to working conditions, rights and employment)				Possible	Moderate	Short- med-long	Negative: uncertain future of equality protection at work, exposure to unemployment, possible increase in informal caring role.
								See Section 4.4.5 in Main Report for full analysis.
	Employment of low and mid educated men (if trade terms				Possible	Moderate	Short- med-long	Negative: Industries that would be very highly exposed to changes in trade tariffs with the EU under WTO
	with EU change to World Trade							rules are important employers of men with low education in Wales,
	Urganization (WTO) rules)							emproying around 21% or row educated men.
								See Section 4.4.5 in Main Report for full analysis.

Ċ 22 Lad La La in Wolce thet . C LL Ü Ċ Teble

Children born into children born into fritties with a parent from Non UK EU country Major Short- Major Young adults Possible Major Short- Major				* - : - : F V	E				
Children born into families with a prent from Non UK EU Country Voung adults Possible Minimal Short- Med Long Probable Major Short- med Long	Age kelated Groups	Children	Possible	MINIMAL	Med-Long	Possible	Moderace	snorc- med-long	Posicive: opportunity to ennance children's rights via Welsh legislation.
V V V Possible Minimal Short- Med-Long Major Short- Major									Negative: potential reduction in
v v v v v v v v v v v v v v v v v v v									rights for children and working
Volume Volume									parents, reduced access to European
vy von Von Von Von Von Von Von Von Von Von V									safeguarding systems, child poverty
V V V V V V V V V V V V V V V V V V V									as a result of any contraction in the
Vy Von Von Von Possible Minimal Short- Med-Long Probable Major Probable Major Probable Major Med-Long Med-Long Med-Long Med-Long Med-Long Med-Long Med-Long Major Short- Med-Long Med-Long Major Short- Med-Long M									economy, mental health and well-
von don don don don don don don don don d									being impacts due to uncertainty
Volume Aon Volume Volum									about post EU future.
Linto a voin voin voin voin voin voin voin voin									See Section 4.4.1 in Main Report for
a von von von Possible Minimal Short- Med-Long Probable Major Short- med-long Med-Long Probable Major Short- med-long									full analysis.
Voluciar Voluciar Possible Minimal Short- Med-Long Med-Long Med-long Med-long Med-long Med-long Med-long		Children born into						Short-	Negative: uncertainty regarding
Variable Minimal Short- Med-Long Major Short		families with a						med-long	future immigration rules and
V Possible Minimal Short- Med-Long Major Short- med-long med-long		parent from Non							settlement status affecting family
Possible Minimal Short- Med-Long Short- Major		UK EU Country							security, education and living
Possible Minimal Short- Med-Long Major Short- Med-Long Major Short- med-long									arrangements.
Possible Minimal Short- Med-Long Med-Long med-long									See Section 4.4.6 in Main Report for
Possible Minimal Short- Med-Long Med-Long Med-Long									full analysis.
Boglood		Young adults	Possible	Minimal	Short-		Major	Short-	Positive: opportunity to develop
availability. Howev is limited by skills i factors. Negative: reducec uncertainty on rep funds to supports opportunities, red employment and s employment and s employment and s full analysis.					Med-Long			med-long	skills base in Wales and increased job
is limited by skills a factors. Negative: reduced uncertainty on rep funds to support s opportunities, red employment and s employment and s employment opportunities, reduced economic see Section 4.4.1 i full analysis.									availability. However, opportunity
Factors. Negative: reduced uncertainty on rep funds to support s opportunities, red employment and s employment and s employment and s employment oppo reduced economic See Section 4.4.1 i full analysis.									is limited by skills and demographic
Negative: reduced uncertainty on rep funds to support s opportunities, red employment and s employment oppo reduced economic See Section 4.4.1 i full analysis.									factors.
uncertainty on rep funds to support s opportunities, red employment and s employment oppo reduced economic See Section 4.4.1 i full analysis.									Negative: reduced access and
funds to support s funds to support s opportunities, red employment and s employment oppo reduced economic See Section 4.4.1 i full analysis.									uncertainty on replacement for EU
opportunities, red employment and s employment oppo reduced economic See Section 4.4.1 i full analysis.									funds to support skills and education
employment and s employment oppo reduced economic See Section 4.4.1 i full analysis.									opportunities, reduced access to EU
employment oppo reduced economic See Section 4.4.1 i Full analysis.									employment and study, impact on
Feduced economic See Section 4.4.1 in Full analysis.									employment opportunities due to any
See Section 4.4.1 in Full analysis.									reduced economic growth.
Full analysis.									See Section 4.4.1 in Main Report for
									full analysis.

Income related groups	People living on low income, including people living in food and fuel poverty				Probable	Major	Short- med-long	Negative: reduced resilience to any economic impacts such as price rises, fall in real wages, reduced employment, and reduced access and uncertainty on replacement for EU regional funding. Cumulative impact with welfare reform and food poverty. See Section 4.4.2 in Main Report for full analysis.
	People at risk of unemployment / who are unemployed	Possible	Minimal	Short- Med-Long	Probable	Major	Short- med-long	Positive: increased job availability, but opportunity is limited by skills and demographic factors. Negative: risk of job losses due to any reduced economic growth See Section 4.4.2 in Main Report for full analysis.
Groups who suffer discrimination or social disadvantage	Black and minority ethnic groups				Probable	Moderate	Short-med	 Short-med Negative: increase in hate crime, reduced tolerance, erosion of equality rights, impact on employment in service industries if "Hard Brexit". See Section 4.4.4 in Main Report for full analysis.

 Med-Long Positive: opportunity for new model and level of funding to meet needs of Welsh population. Negative: uncertainty regarding future regional funding for community, economic development and infrastructure investment in Wales. See Section 4.4.3 in Main Report for full analysis. 	 Short-Med Positive: release from the Common Agricultural Policy, ability to access new markets, and opportunity to shape agricultural policy in Wales. Negative: loss of income streams from EU, increased uncertainty around replacement funding. See Section 4.4.3 in Main Report for full analysis. 		See Section 4.4.3 in Main Report for full analysis.	 Short- Negative: academic analysis and med-long other evidence from some large companies suggests possible impacts on investment and future operations in Wales. See Section 4.4.3 in Main Report for full analysis.
Yed Ye	Shor	e impact	e impact	Short- med-l
Major	Major	ce to define	ce to define	Major
Probable	Probable	ient evidend	ient evidend	Possible
Med-Long	Long	ently insuffic	ently insuffic	
Moderate	Major	Possible impact but currently insufficient evidence to define impact	Possible impact but currently insufficient evidence to define impact	
Possible	Probable	Possible imp	Possible imp	
People living in areas with poor economic and health indicators / areas of Wales that have been significant beneficiaries of EU funding	Farmers / rural communities	Port towns	Coastal towns e.g. tourism workforce and bathing water quality	People living in areas where large employers may leave
Geographical groups				

Other vulnerable groups	People in need of health and social care	Probable	Major	Short- med-long	Negative: The Welsh population is significantly exposed to changes in the capacity of health and social care services, for example as a result of a greater health need such as a higher proportion of residents having a long term illness. Recruitment and supply challenges within the NHS and social care sector, alongside the health consequences attributed to any economic difficulties and unemployment, has the potential to increase pressures on health and social care services. See Section 4.4.6 in Main Report for full analysis.
	Small business owners / employers who import or export goods and services	Probable	Moderate	Short-Med	Negative: uncertainty of any future trade and regulation deals, potential increased paperwork and checks, workforce issues such as loss of EU staff. See Section 4.4.6 in Main Report for full analysis.
	Non UK EU Citizens and families living in Wales	Probable	Major	Short- med-long	Negative: uncertainty regarding future immigration rules and settlement status affecting security of livelihood and living arrangements. See Section 4.4.6 in Main Report for full analysis.
*This relates to the focus in Welsh poli	*This relates to the opportunity to further strengthen rights of children in Wales, although this is already a strong focus in Welsh policy with the adoption of the UN Rights of the Child. Therefore, the scope to improve is minimal.	es, although ·e, the scope	this is alread to improve i	ly a strong s minimal.	

For five population groups there are potential **positive** impacts of Brexit. The majority of these impacts are classed as 'possible' (they may plausibly happen but there is limited evidence to support this), and are anticipated to have either a minimal or moderate impact. Farmers and those living in rural communities will probably experience a major positive impact / opportunity over the long term, related to the UK's release from the Common Agricultural Policy and ability to access new markets. However, this group will probably see a major negative impact in the short to medium term, due to the loss of EU income streams and current uncertainty around replacement funding.

Potential **negative** impacts have been identified for all the population groups considered. Most impacts are identified as 'probable', and for the majority the negative impact is considered to be major. The groups that are considered to be most likely to experience a major negative impact are: children born into families with a parent from a non UK EU country; non UK EU citizens and their families; young adults; people living on low income; people at risk of unemployment; those who are unemployed; people living in areas with poor economic and health indicators or areas that have been beneficiaries of EU funding; farmers and rural communities; and people in need of health and social care.

It is recognised that as the Brexit process continues and evolves, the impacts identified in the table may change or there may be other impacts that are, as yet, unidentified and which may ultimately be of equal significance to health and well-being.

Key Finding 3: Indirect impacts on mental well-being

Stakeholders who participated in the HIA have identified a number of potential mechanisms through which population mental health and well-being could be affected by Brexit (see Main Findings report, section 4.3). These include increased uncertainty; an altered sense of control; family and community relationships; economic decline and unemployment; levels of community resilience following major change; increased mobilisation of social and political capital; and impacts on inclusion and discrimination.

These mechanisms of influence on mental well-being are supported by a review of the literature. However, the HIA has not identified any analysis of health data or qualitative research carried out to date on the impact of Brexit on population mental health and well-being. This is an area where surveillance and research should provide a better understanding of the issues, including impacts that may have begun since the vote to leave. Evidence regarding previous economic crises suggests that policy interventions can be effective in reducing or mitigating the impacts of economic decline on mental health and well-being.

Key finding 4: The policy context in Wales

Stakeholders at the HIA workshop and in interviews stated that the Well-being of the Future Generations (Wales) Act 2015 (WFG Act) provides a powerful legislative framework which promotes collaboration, integration, long term thinking, preventative approaches and public involvement (see Main Findings report, section 5). Participants stated that any new devolved powers, policy frameworks or levers, which emerge from Brexit or post withdrawal, should take account of the Act's sustainable development principle and its (five) ways of working. They have also identified that the WFG Act is a positive force to counteract any potential negative impacts of Brexit and can help shape the long term future of Wales, in line with Wales' (seven) well-being goals. Stakeholders have recommended that there is a need to focus on the sustainable development principle rather than only managing the immediate consequences of Brexit.

HIA workshop and interview participants identified Brexit as providing an opening to reflect on current policy and identify new opportunities for improved policy and increased devolution, which may be more appropriate to meet Wales' future needs. Participants in the HIA workshop identified the opportunity cost of organisations across all sectors focusing on preparing for withdrawal from the EU as a major negative unintended consequence of Brexit, and that this could lead to a reduced focus on many other policy priorities, such as climate change.

Key Finding 5: Trade and trade agreements as a key determinant of health

A rapid review of evidence on the potential impacts of Brexit on the economy, and the relationship between trade, the economy and health outcomes has been carried out as part of the HIA. A more detailed discussion of the findings can be found in Section 3 of the Main Findings report.

The impact of any possible reduction in economic growth, rising inflation and consequent reductions in public spending due to Brexit are one set of mechanisms through which health impacts may occur. The evidence clearly shows that such economic downturns significantly affect the determinants of health such as income, employment and living standards, with strong evidence connecting these with impacts on mental health. However, predicting health outcomes is complex and difficult. Evidence from other economic crises suggests that policy interventions such as active labour market programmes, family support, and primary mental health care can help reduce or mitigate impacts on mental health and well-being.

There is strong evidence that the provisions of international trade agreements have significant influence on the determinants of health and well-being. There are both risks and opportunities for population health in future trade agreements post Brexit and these will require ongoing scrutiny and advocacy by public health experts to ensure that health and well-being are protected and promoted. This is a complex and large-scale task, given the potential increased volume of bilateral trade agreements that may occur post Brexit. This will also have workforce development implications for public health, as internationally there has been little focus within public health practice, education and research perspectives on engaging with globalised trade policy.

6 Summary

6.1 Potential Positive Impacts

The HIA identifies a number of potential positive impacts or opportunities for health and well-being in the medium to long term following the UK's withdrawal from the EU. As mentioned earlier, these are based on the premise that action is taken to maximise benefits or any opportunities presented by Brexit and are highly contingent on policy commitments and / or interventions in the short and medium term from Welsh Government and public services. These include (in no particular order of importance):

- Working with the UK Government to restructure future funding models for Wales
- Increasing skills and training opportunities for the population, including for health care staff in Wales
- Maintaining and growing collaborative relationships with partners in European countries and exploring and building on non EU relationships and collaborations in relation to academia and research and development
- Reviewing agriculture policy to focus on sustainability, with the potential to increase local sustainable food production and supply, and to decrease Wales's carbon footprint
- Enhancing key social, workplace, equality, food and environmental regulatory protections
- Strengthening tobacco and alcohol regulatory, legislative or fiscal measures in law, regulation or future trade agreements



6.2 Potential Negative Impacts

The HIA identifies potential negative impacts from the UK's withdrawal from the EU, many of which are in the short to medium term and are across the breadth of the key determinants of health and include (in no particular order of importance):

Health care services

- Potential increased pressure on National Health Service (NHS) and social care staffing levels as a result of recruitment and retention issues
- Reduced or delayed access to new medicines, clinical trials and devices due to the UK leaving key regulatory and coordinating bodies
- Loss of access to European Reference Networks and rapid access to specialist clinical care for rare diseases

Access to healthy, safe and affordable food

- Disruption to food safety and standards systems, labour and supply chains
- Food standards regulations could be adversely impacted through future trade agreements or policy changes
- Any increase in inflation as a result of Brexit may increase the cost of food, which will particularly impact on people on low incomes. This needs to be seen in the context of the recent growth of food bank use across Wales

Public health / health security

• Reduced health protection capability due to the UK no longer participating in key EU public health coordinating systems and evidence sharing mechanisms

Changes relating to EU legislation, regulations and standards

- Standards of social, workplace, equality, employment and environmental protections could be adversely impacted through future trade agreements or policy changes
- Loss of jurisdiction of the EU Charter of Fundamental Rights for UK citizens

Employment

• Potential for increased unemployment in sectors highly exposed to import and export markets due to changes in tariffs, non-tariff barriers and customs regulations

Access to EU funding

- Loss or reduced access to future EU funding for infrastructure, tackling inequalities and poverty and economic development
- Uncertainty of future agricultural payments model

Research and Development

- Loss or reduced access to future EU funding for research and development
- Loss or reduced access to EU research collaborations and networks

Mental health and well-being

 Impact on mental health and well-being through uncertainty about the future, strained family and community relationships, economic decline, levels of community resilience to major change, and reduced community cohesion and tolerance

6.3 Duration of Impact

The HIA has also assessed the impact of Brexit in the short to medium term and the medium to long term on the population (in no particular order of importance):

Short to medium term

- The economic status of the UK and Wales post Brexit could have a positive or negative impact across the wider determinants of health and well-being and is dependent on the nature of any trade agreements and UK Government economic policy
- There will be major disruption if contingency planning and mitigating actions are not functional when needed, for example in areas such as medicines, health protection, food supply, social care staffing and other workforce issues
- The uncertainty about the nature of the UK's departure from the EU could have a negative impact on population mental well-being. Community cohesion and resilience could also be affected
- There are a number of potential detrimental health and well-being impacts linked to the regulatory agenda and leaving key coordinating agencies, including disruption to supply chains for food and medicines, food safety systems and environmental health determinants
- Further research, engagement and monitoring is needed to assess the impact on the vulnerable populations identified in the HIA





Medium to long term

- The economic status of the UK and Wales post Brexit could have a positive or negative impact across the wider determinants of health and well-being and is dependent on the nature of any trade agreements and UK Government economic policy
- Enabling employment, training and skill opportunities through Welsh Government levers and policy could maximise any potential positive opportunities of Brexit
- Wales could seize the chance to build on its natural resource and sustainable development policy and create more favourable working conditions which could attract key workers
- Wales could continue to strengthen relationships with other devolved UK nations and with individual agencies. Maintaining existing relationships and collaborations with EU partners wherever possible will remain important but there are also opportunities to build new partnerships with the World Health Organization (WHO) and other international health organisations
- Key social, public health and environmental protections could be enhanced or reduced e.g. air quality, working conditions, labelling for alcohol or tobacco products
- Equality and rights legislation, depending on final policy positions, could be enhanced or reduced
- People living in areas with poor economic and health indicators / areas of Wales that have been significant beneficiaries of EU funding will need to be supported and action taken to develop new models of funding
- Action to address inequalities in community, economic and infrastructure investment will need to be developed to address the long term impact of Brexit

In order to maximise any identified opportunities, policy actions will need to be taken in the immediate to short term.

7 Future Action

Detailed recommendations on the issues identified is beyond the scope of this report. The tables below represent a list of areas for future action that government and other public services need to ensure are being monitored and addressed. Each of the identified areas for action requires a co-ordinated and collaborative multi-agency response, to ensure that effective and timely interventions are implemented, in order to maximise opportunities and minimise any negative impacts on health and wellbeing. The actions identified in the table are an assessment of need for action and are not a reflection of whether action is already being undertaken.

Action needed	Action is needed to prevent or mitigate potential negative impacts or maximise opportunities for health
Active engagement needed	Action is needed, for example to influence policy development within Wales, UK and Europe and future trade agreements
Research priority	Research is needed in the next 12-18 months to fill significant evidence gaps or reduce the uncertainty in the current level of understanding, in order to assess the need for additional action
Watching brief	The evidence in these areas should be kept under review, with long term monitoring and surveillance of impact levels and adaptation activity so that further action can be taken if necessary

The actions can be categorised as follows¹:

¹ This HIA has used an amended version of the urgency ratings from the UK Climate Change Risk Assessment (Committee on Climate Change, 2017) to enable areas for action to be identified and prioritised across the determinants of health and population groups identified in the HIA.

Determinant of health	Action category	Rationale
Access to health and social care	Action needed	Affects the whole population, but particularly vulnerable groups. In the short to medium term there is one confirmed (staffing) and five probable negative impacts identified (medicines, medical devices and clinical trials, health protection, rare diseases, reciprocal (cross-border) health care
		and social care). See Section 4.2.9 in Main Report for full analysis.
Lifestyles: Food: safety, standards and access	Action needed	Affects the whole population. The scale of change and contingencies required are significant and in a short time frame. The UK may not remain a member of the European Food Safety Authority nor have access to current food safety systems. In terms of food supply, loss of labour and customs changes are key issues in the short term. Inflation may affect affordability of food and impact on health and health inequalities. See Section 4.2.1 in Main Report for full analysis.
Lifestyles: Alcohol and Tobacco	Active engagement needed	Affects large sections of the adult population. Active engagement is needed to strengthen key legal and regulatory mechanisms in new trade agreements or legislation e.g. labelling. See Sections 4.2.2 and 4.2.3 in Main Report for full analysis.
Living Environment: Environmental regulations	Active engagement needed	Affects the whole population. Active engagement is needed to improve environmental standards and regulations in new trade deals and legislation e.g. Air Quality. See Section 4.2.5 in Main Report for full analysis.
Living environment: Working conditions	Active engagement needed	Affects a large proportion of the population, early years and family life. Active engagement is needed to improve working conditions following new trade deals and legislation. See Section 4.2.8 in Main Report for full analysis.

7.1 Action categories for the determinants of health

Determinant of health	Action category	Rationale
Economic conditions: Employment	Active engagement needed	Affects the adult working age population, children and young people, and future generations.
and skills		Could impact on health inequalities.
		Significant potential for impact on economy and jobs. Active engagement is needed to support policy change and investment to enable positive impacts.
		See Section 4.2.6 in Main Report for full analysis.
Economic	Active	Affects the whole population.
conditions: EU funding	engagement needed	Directly affected by Brexit, resulting in significant potential for reduced access to key funding streams (structural, research and development and agricultural) for Wales. Active engagement is needed to influence future funding models and rules for access.
		See Section 4.2.7 in Main Report for full analysis.
Human rights	Active	Affects the whole population.
	engagement needed	Active engagement is needed to protect and improve key social, working and equality protections in new trade deals and legislation. See Section 4.2.4 in Main Report for full analysis.
Mental well-	Research	Affects the whole population.
being	priority	There is some evidence that Brexit could have an impact based on the experience of previous economic downturns (e.g. increase in suicide) due to uncertainty or potential political and social upheaval, but further insight and evidence is needed. This could be qualitative research and / or monitoring rates of depression and suicide. See Section 4.3.1 in Main Report for full analysis.
Community	Research	Affects the whole population.
resilience and cohesion	priority	There is plausible evidence that Brexit could have an impact but further insight and evidence is needed e.g. community safety and resilience. See Section 4.3.1 in Main Report for full analysis.

7.2 Action categories for population groups

Population group	Action category	Rationale
Children born into families with a parent from Non UK EU Country	Action needed	4% (around 20,000) of all Wales-resident children live in a household where at least one person is an EU citizen. Around 7,000 are aged 0 to 4 years. This group are potentially exposed to uncertainty and disruption to their family lives and education, dependent on future immigration policy. See Section 4.4.6 in Main Report for full analysis
Families impacted by uncertain / new immigration regulations (e.g. EU citizens living in Wales)	Action needed	Uncertainty on future immigration rules may affect security of livelihood and living arrangements. In particular, for those who have lived and worked in the UK for less than 5 years. See Section 4.4.6 in Main Report for full analysis
People in need of health and social care services	Action needed	23% of adults (696,000 people) in Wales have a long term illness. This group is vulnerable to any increasing pressures on health and social care resulting from Brexit. See Section 4.4.6 in Main Report for full analysis.
People who are living on low income	Active engagement needed	This group already experiences poor health outcomes. Brexit could have a cumulative impact with welfare reform. People on low income are highly exposed to inflation on essential goods e.g. food and clothing. See Section 4.4.2 in Main Report for full analysis.
People who are unemployed / at risk of unemployment	Active engagement needed	This group already experiences poor health outcomes. Economic decline and future trade terms may impact on jobs. Policy intervention is needed to leverage positive opportunities. See Section 4.4.2 in Main Report for full analysis.

Population group	Action category	Rationale
People living in areas with poor economic and health indicators / areas of Wales that have been significant beneficiaries of EU funding	Active engagement needed	This group already experiences poor health outcomes. These areas are likely to experience significant future loss of community, infrastructure and economic development funding. Policy intervention is needed to leverage positive opportunities e.g. on any new funding models. See Section 4.4.3 in Main Report for full analysis.
People living in areas where large employers may move away	Active engagement needed	Economic decline and future trade terms may impact on jobs. An existing framework on Mass Unemployment Events provides a public health approach to preparing and responding to such events. See Section 4.4.3 in Main Report for full analysis.
Small business owners	Active engagement needed	89.1% of enterprises in Wales are micro enterprises. Potential negative impact on this group are due to the uncertainty of any future trade and regulation deals, potential increased paperwork and checks, costs or workforce issues. See Section 4.4.6 in Main Report for full analysis.
Children	Active engagement needed Research priority	There are a wide range of potential long term impacts as a result of reduced public finance, reduction in rights, and changes in working, living and economic conditions for families e.g. potential for increase in misuse of alcohol, impact on mental health and well-being which could lead to an increase in Adverse Childhood Experiences. See Section 4.4.1 in Main Report for full analysis.
Farmers / rural communities	Active engagement needed Research priority	Highly relevant to Welsh population. There is potential for large-scale change and transition, as well as uncertainty in the short to medium term. Policy intervention is needed to leverage positive opportunities. See Section 4.4.3 in Main Report for full analysis.

Population group	Action category	Rationale
Young adults	Active engagement needed Research priority	There are already existing concerns about the mental health of young people. Policy intervention is needed to leverage positive opportunities in areas such as skills. Potential negative impacts have been identified but further insight and evidence is needed. See Section 4.4.1 in Main Report for full analysis.
Port areas in Wales	Research priority	An impact is possible, but the nature of the impact is currently uncertain. See Section 4.4.3 in Main Report for full analysis.
Black and minority ethnic groups	Research priority	Evidence suggests a negative impact related to hate crime, but more research is needed to understand the scale and nature of the impact. See Section 4.4.4 in Main Report for full analysis.
Women / Men	Watching brief	The nature of the impact is dependent on future policy and trade terms. See Section 4.4.5 in Main Report for full analysis.
Coastal areas	Watching brief	An impact is possible, but the nature of the impact is currently uncertain. See Section 4.4.3 in Main Report for full analysis.

8 Conclusion

This HIA draws on the available evidence (including expert stakeholder knowledge, critically appraised literature and health intelligence information) to identify the **potential** implications of Brexit for population health and well-being in Wales - both negative and positive. As Brexit has not yet occurred at the time of writing, it has not been possible to access evidence of **actual impact**. However, this HIA offers important early findings to enable effective planning and decision making.

Many of the **direct impacts** of Brexit will affect the entire Welsh population, for example through food supply and standards; large sections of the population, for example by impacting on working conditions; or specific groups, such as people in need of health and social care services.

In terms of the **determinants of health and well-being**, the analysis of impact shows that nearly all potential *positive impacts / opportunities* are 'possible', that is they may happen but there is limited evidence to support this. The majority of potential *negative* impacts identified are considered to have either a moderate or major impact, and most are estimated to have either a probable or confirmed impact. Of note, the four areas identified (see Table 1) as having a confirmed major negative impact in Wales are:

- Workforce challenges in sectors linked to health and well-being
- EU agricultural and land management policy / funding
- EU research and development funding for health-related technologies and treatments
- Recruitment and retention of health care staff

In relation to **population groups**, potential positive impacts and opportunities have been identified for five of the 16 groups considered, although in the main these are 'possible'. For all the population groups considered, negative impacts have been identified (See Table 2). Most negative impacts are identified as 'probable', and for the majority the impacts are considered to be major.

The HIA has identified a number of mechanisms through which population **mental health and well-being** could be affected by Brexit; surveillance and research are urgently needed to better understand these issues. Another key finding of the report is that any **reduction in economic growth**, rising inflation and consequent reductions in public spending due to Brexit are important mechanisms through which health impacts may occur, with the terms of **international trade agreements** impacting the determinants of health and well-being.

Stakeholder evidence highlighted the unique policy context in Wales, driven by devolution and a focus on **sustainable development**. These could provide a number of positive opportunities for the people of Wales, such as more sustainable food production and land management. More detail on these findings is contained in the Main Findings report in Section 3 (Trade, the Economy and Health), Section 4 (Appraisal of the Evidence) and Section 5 (The Wider Policy Implications for Wales).

There is an immediate need for organisations across all sectors to engage now and ensure that **effective collaboration and co-ordination** maximises opportunities in the Brexit process for better population health and well-being. The use of policy levers, particularly around the economy and trade; employment, skills and training; and resource management and agriculture must be cognizant of their impacts on well-being and avoid weakening health protecting regulations already in place (See Main Findings report, Section 4). Minimising harms and maximising opportunities for Wales requires a fully co-ordinated response to Brexit across all sectors. Such coordination requires a lead organisation or agency in each field (for example health, agriculture, employment) and overall leadership to ensure integrated and timely planning. This HIA has provided some of the intelligence required to underpin such a lead function but has also identified that there will be a deficit of integrated intelligence unless on-going mechanisms are put in place. As seen earlier in Sections 5 and 6.3, the impact of Brexit and the need for an integrated response is likely to extend long after the withdrawal date (29th March 2019) and therefore such plans should take a much longer (3-10+ year) view. In the short to medium term the intelligence contained in this HIA could be routinely updated to help to underpin such collaboration, coordination and monitoring.

Stakeholders who contributed to the HIA suggested **early investment in key community assets** and activities, to build community cohesion and resilience and mitigate negative impacts as a result of current uncertainly or future impacts on employment, economy and subsequently mental health and well-being (see Section 4.3.3 of the Main Findings report). The Well-being of Future Generations (Wales) Act (WFG Act) provides a framework for Welsh public bodies, for example requiring them to work towards a Wales of cohesive communities with a vibrant culture and thriving Welsh Language. Within such a framework the HIA has identified a range of potential mitigations to issues that may otherwise impact mental health and well-being through uncertainty, economic difficulties or impacts on employment arising from Brexit. Such activities should build on Welsh assets including:

- Welsh arts and culture
- Our agricultural assets and natural environment to ensure they are sustainably developed to support the health, well-being and prosperity of our residents
- Our other international relationships (non-EU based) so that Wales can develop greater international collaboration and leadership through, for instance, United Nations bodies such as the World Health Organization (WHO)
- Using the above to enhance our international reputation and make Wales an attractive place to invest and reside



Progress is being made in Wales to ensure health and business continuity and to address immediate issues such as health protection and health security threats. There is a need now to think ahead of the immediate situation, in order to ensure longer term strategic thinking positions policy and investment according to the opportunities and assets highlighted above. Part of this requires fostering, co-ordinating and strengthening partnerships across the four UK nations, across Europe and globally to enhance existing collaborations and develop new ones. Whilst immediate collaborations may focus on policy, research and developments that mitigate detrimental consequences of Brexit, they should also provide a starting platform for inter-agency and international co-ordinated work for the future. The health and well-being impacts of Brexit (whether positive or negative) and emerging risks and opportunities need to be continually monitored and reflected in collaborative arrangements and work. The sustainable approach already established by the WFG Act provides a useful template to ensure partnerships are long term and focus on protecting and improving health and well-being for current and future generations.

Recommended Actions

This HIA has identified a number significant impacts on population health and well-being in Wales which could arise as a result of Brexit. Whilst detailed recommendations are beyond the scope of this report, areas for future action have been highlighted, which require government and other public services and sectors in Wales to develop a collaborative and co-ordinated multi-agency response to maximise any opportunities and benefits and minimise any negative impacts. Specific actions arising from this report include:

- Policy makers and public services should consider the range of potential impacts of Brexit identified in this report (Sections 5 and 6) and the areas for future action (Section 7) and ensure co-ordinated actions are in place to address each. The report should also be considered by multi-agency structures that have been set up to prepare for and respond to Brexit, in order to provide co-ordination across activities and ensure interdependencies between them have been identified and addressed.
- 2. A number of population groups, for example non UK EU Citizens, deprived and rural communities, have been identified as especially vulnerable to harms from the Brexit process (see Section 5, Table 2). Policies and actions should be prioritised in order to address impacts on such population groups where Brexit may be most detrimental. All actions (not just those in health) should explicitly demonstrate how they have taken into consideration the protection and improvement of health and well-being of all residents in Wales, but especially the most vulnerable.
- Leadership across the totality of Brexit issues needs to continue to provide overall direction to Wales' response, and critically reassurance that plans work appropriately across agencies as well as across time scales (short, medium and long term).
- 4. Public bodies should establish a joint organisational framework, such as a 'Risk and Impact Framework' to help develop, co-ordinate, implement and monitor their response to Brexit. The social determinants of health, for example education and employment, and areas of immediate risks to health (including mental health) and health care, for example staffing should be part of this framework. The framework should be informed by intelligence systems that routinely monitor the impacts of Brexit in Wales in general but in particular on the groups anticipated to be most affected (see Recommendation 5 and Section 5, Table 2).

- 5. Data and intelligence across agencies relating to the potential impacts of Brexit (see Sections 5 and 6) should be combined and used in a regularly updated dashboard to inform joint policy and strategic decision making. This should include retrospective data from before the referendum, to establish a baseline before Brexit uncertainties began and to examine impacts related to Brexit that may have already taken place, for example on mental health, recruitment, investment in Wales.
- 6. Organisations and partnerships should use the Well-being of the Future Generations (Wales) Act 2015 to frame their response to Brexit. This includes ensuring that the impacts on and the needs of children and young people who will be most affected in the future (including future generations) are considered (see Section 5, Key Finding 4). Action needs to focus on prevention of negative impacts and protection of well-being, recognising links with the social determinants of health.
- 7. Further research is needed on the impact of Brexit on mental health and wellbeing, community resilience and cohesion, children and young adults, farmers and rural communities, port areas and black and minority ethnic groups (Section 7). This should supplement data in the dashboard and could be used in combination to model future impacts for Wales.
- 8. The public health workforce currently lacks the experience and skills to influence and contribute to trade agreements (see Section 5, Key Finding 5). The public health system should consider how to build knowledge, skills and capacity to ensure health and well-being are considered at the forefront of such processes. Other public services may have similar deficits that need addressing.
- 9. Public Health Wales, in partnership with Welsh Government and other key stakeholders, should monitor and evaluate the utilisation of this HIA. Public Health Wales (with input from the Strategic Advisory Group) should routinely review, monitor and share the key findings of this HIA, in order to inform the response of policy and decision makers, public services and multi-agency groups in Wales.

"There are few aspects of legislation that don't impact on the public's health, whether through the opportunity and nature of employment, regulatory frameworks for services and products, or protection of the natural environment. The UK's departure from the EU will have significant and wide-ranging implications for national laws and regulation, trade relationships, the movement of people and the distribution of resources. The process will require a great many agreements between parliamentarians in the four nations of the UK, as well as with those in Europe.

It has been described as 'arguably the greatest peacetime challenge the UK has ever faced'. But it also represents an opportunity to work towards a more ambitious vision for future policy, legislation and regulation. Promoting a health-in-allpolicies approach to post-Brexit arrangements could put centre stage the protection and promotion of the public's health".

The Health Foundation (2018) Policies for Healthy Lives: A Look Beyond Brexit (p.3)

Note on the Limitations of the HIA

In order to provide timely evidence to Public Health Wales and stakeholders, this HIA has been undertaken in a short timescale (July 2018 to December 2018). This has limited the depth of evidence collation and analysis undertaken. The scale and complexity of the impacts of Brexit means that the HIA has focused on major direct and indirect impacts; it is recognised that there may be other impacts that are, as yet, unidentified. **It is important to note that the majority of impacts stated in this report are potential rather than actual.**

The withdrawal of the UK from the EU is an unprecedented situation and there has been ongoing uncertainty regarding the UK Government's negotiating position. Therefore, there is limited evidence on the precise impacts of any Brexit scenario and as a result this HIA has not evaluated specific Brexit scenarios, but focused on the potential impacts for Wales as a result of the UK leaving the existing framework of the EU.

Evidence of the impact of Brexit on a wide range of policy areas is either unknown or highly contested and many assumptions have been made within the high-level evidence used within this report. Where possible, these have been included to provide the rationale for why certain impacts have been highlighted.

Attribution can be challenging in public health and impact on health outcomes are difficult to capture from a complex event such as Brexit with its myriad of shaping factors and context. Any changes can also be due to other changes or factors in a population, for example austerity policies.

This HIA is focused on a distinct Welsh political, social and economic context, which limits its transferability, although elements may be transferable to other devolved nations. However, it is hoped the findings of the HIA will be useful to agencies and decision makers both within Wales and beyond.

TIN

Health Protection Providing information and advice and taking action to protect people from infectious diseases and environmental hazards

Microbiology

Providing a network of microbiology services which support diagnosis and management of infectious diseases

Health Improvement

Providing information, advice and taking action, across sectors, to promote health, prevent disease and reduce health inequalities

Health intelligence Providing public health data

analysis, evidence finding and

knowledge management

Public Health Wales what we do

We exist to protect and improve health and wellbeing and reduce health inequalities for people in Wales. We work locally, nationally and internationally, with our partners and communities, in the following areas:

Screening

Providing screening programmes which assist the early detection, prevention and treatment of disease

Policy, research and

international development

Influencing policy, supporting research and contributing to international health development

24

Safeguarding

Providing expertise and advice to help protect children and vulnerable adults

NHS quality improvement and patient safety

Providing the NHS with information, advice and support to improve patient outcomes

Primary, community

and integrated care Strengthening public health impact

through policy, commissioning, planning and service delivery





Public Health Wales Number 2 Capital Quarter Tyndall Street Cardiff CF10 4BQ Tel: 02920 227744

www.publichealthwales.org Email: generalenquiries@wales.nhs.uk @PublichealthW /PublicHealthWales