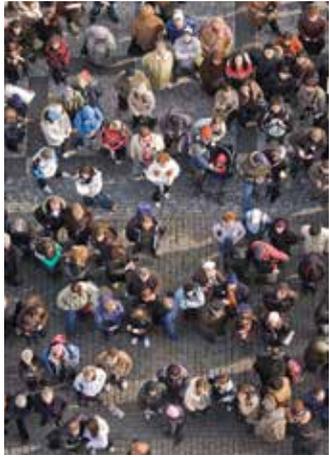




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Mass Unemployment Events (MUEs) – Prevention and Response from a Public Health Perspective

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Mass Unemployment Events (MUEs)

Impact of MUEs on workers¹

Behaviour: Job loss leads to increased unhealthy behaviour

-  Drinking more
-  Smoking
-  Being overweight
-  Drug misuse

Increased risk to physical and mental health

	Year 1	Year 4	Long term increased risk of
 Death from heart attack or stroke			 Death (evident 20 years later) 
 Death from alcohol related disease			 Admission to hospital for alcohol related disease (evident 12-20 years later) 
 Suicide			 Admission to hospital for self harm (evident 8 years later) 

Impact on wellbeing

- Higher anxiety and depression 
- Loss of self-esteem and life satisfaction 
- Financial hardship 

Impact on different groups

- Older, unskilled workers are at **higher risk of remaining unemployed** or only getting insecure, low paid jobs 
- Younger, skilled workers are **more mobile**, adaptable and find new employment quicker 
- Homeowners are **less likely/able** to move for work

Impact of MUEs on households and families²

Families provide vital support for workers facing redundancy, but can also be affected themselves

Spouses

- Spouses **more likely** to 'suffer in silence' and carry emotional burden 
- Effect on spousal mental health **almost as high** as redundant workers 
- **Family dynamic may change.** Changes to main income earner, or moving away for work 
- **Reduced family income** causing financial difficulties 
- **Increased family stress** and difficult family relationships 

Children

- **Negative effects** on child health, education, and youth unemployment 
- **Risk of effects passing on to next generation** (unemployment, lower earning) 

Wider impact of MUEs on communities²

-  **Increased competition for jobs** current unemployed less likely to find work
-  **Loss of community links, social networks and increased social isolation**
-  **Strain on communities that provide vital support for workers**
-  **Strain on local businesses**
-  **Home devaluation** in some areas, homes more difficult to sell

¹ Figures presented are from studies of industrial plant closure, published after 2000. Most quantitative estimates are from large international cross sectional studies analysing retrospective routine data which do not control for underlying health and health behaviour. ² Information on community and family effects are from qualitative studies.

A public health informed response

Workers that find good quality employment have:

✓ better health

✓ better wellbeing

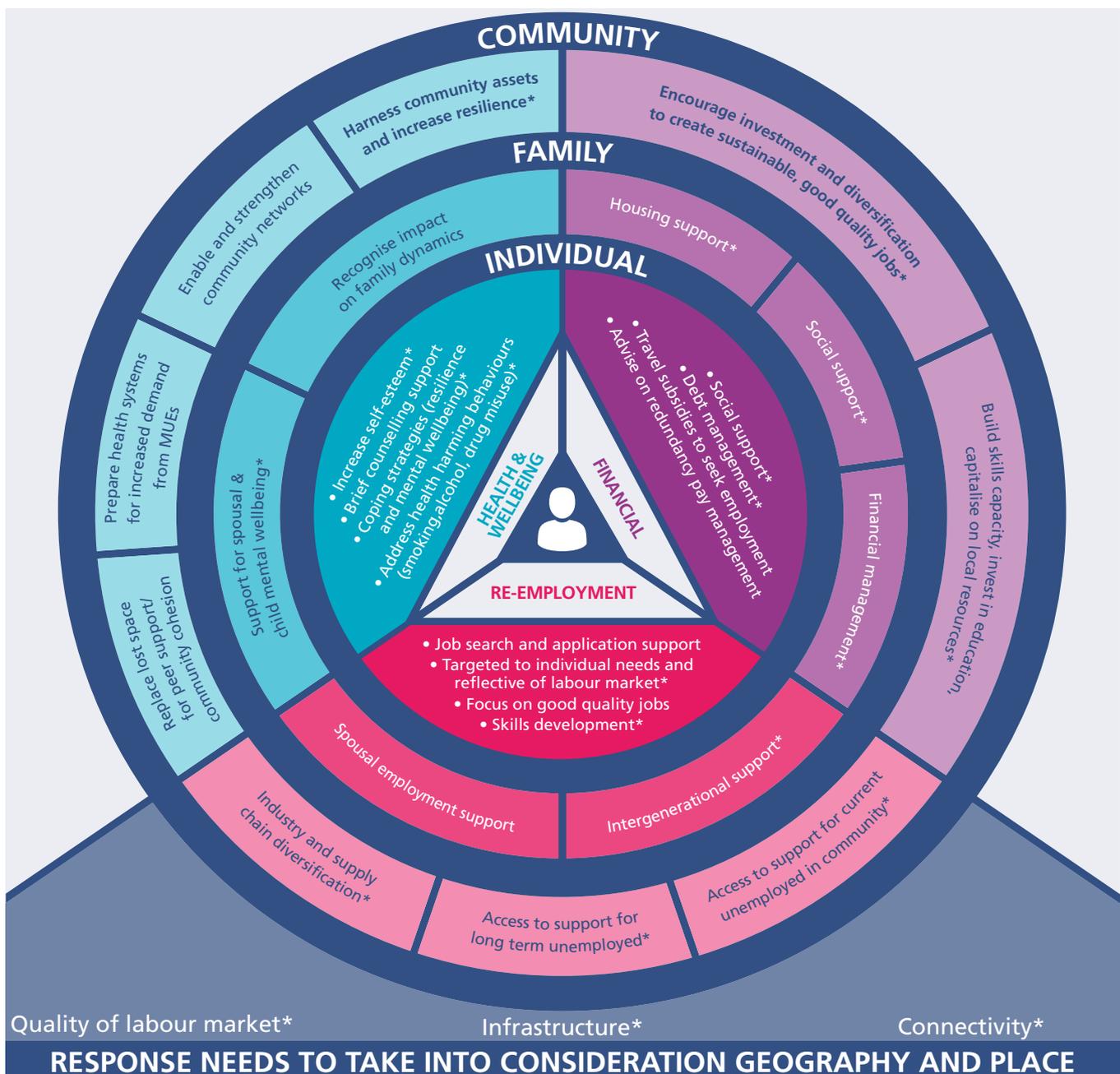
✓ better job satisfaction

✓ better job security

Key steps

■ Before ■ During

- 1 **Identify communities** at risk of MUEs and assess the potential impact
- 2 Develop an **early warning** approach for potential MUEs
- 3 Early mobilisation of a **multi-sector response**, including **health and community** perspectives
- 4 Early implementation of **tripartite support (re-employment, financial, health and wellbeing)** for redundant workers
- 5 Address the needs of **specific groups**, including those older and unskilled
- 6 Extend support to **family** members
- 7 Support the wider **community** and harness assets
- 8 **Evaluate** the impact of the response



* Key aspects which need to be considered before, during and after a mass unemployment event. Suggested citation: Davies AR, Homolova L, Grey C, Bellis MA (2017) Mass Unemployment Events (MUEs) – Prevention and Response from a Public Health Perspective. Public Health Wales. ISBN: 978-1-910768-42-6. © 2017 Public Health Wales NHS Trust. Full report available at www.publichealthresearchwales.co.uk/mue-mass-unemployment-events-report.

Foreword

Being excluded from work is a tragedy for the individual; mass unemployment events occur on a global stage and are a scourge upon society.

One influential study reported that, in men aged 40–59 years, mortality doubled in the five years following redundancy, in the late 1970s¹. This was unrelated to socio-economic status, health behaviours, and other health indices. Among other health hazards, redundancy is associated with increased risk of heart disease, stroke, mental illness, and diabetes. When communities are blighted by unemployment, this adversely affects the mental wellbeing of the displaced workers themselves, their families, friends, and the communities in which they live. Moreover, the ‘psychosocial scar’ persists and may do so across generations.

Mass unemployment events can destabilise communities over many generations, as evidenced in historical coal mining areas in the UK; affecting local employment, and exacerbating social and health inequalities. The impact of mass unemployment on health is helpfully brought together in this report, building the argument for including health in short and longer term responses to these events.

Preparedness for mass unemployment events is essential; and the framework presented here, outlining **a public health approach to responding to mass unemployment events**, addresses a key gap. The framework has been developed by drawing on lessons from past responses to mass unemployment events, from both the academic literature, but also through marshalling constructive perspectives across eight countries from a wide range of well informed individuals with relevant expertise. In doing so the authors recognise the critical importance of learning from the past, and the recognition of both the short and longer term

adverse impacts on health and wellbeing on individuals, families, and communities.

Cooperation and mutual support in adversity are among the earliest and most fundamental hallmarks of human society; and embody a sense of values, social responsibility and willingness to help others, which determines the kind of civilised society in which we wish to live. This public health approach to responding to mass unemployment events sets out to do just that, by taking into consideration the impact on the wider determinants of health in the context of the individuals and the populations affected. Many of the people excluded from work during mass unemployment have multiple disadvantages and face diverse barriers in returning to work: not least age, lack of appropriate skills, high local unemployment rates, and employer discrimination. These adverse influences have by no means been overlooked in the construction of this framework. Equally, there is a welcome emphasis on good employment as a key to good health.

Preventing or reducing the adverse impacts of mass unemployment events on the health and wellbeing of individuals and communities, could reduce the growing burden on the nation’s health services and contribute to the quest to decrease the social and health inequalities divide. The importance of prevention and minimising the impact on communities, by ensuring greater community resilience and supporting individuals to be better equipped to secure sustainable employment to mitigate the effects of employment shocks, is also a welcome reflection here.

International and national sustainable development policies have been increasingly considerate of the need to ensure that communities are resilient to external shocks, including those that are economic. All of these articulate the need to ensure healthy lives, promote wellbeing and sustainable economic growth, and achieve full, productive employment and decent work for all. Emphasis has also been placed on preventing new and reducing existing mass unemployment disaster, by decreasing vulnerability to these events, and by increasing preparedness for response and recovery, thus strengthening resilience. In Wales, we have the landmark Wellbeing for Future Generations (Wales) Act (2015), with its goal of achieving a more resilient, more healthy, and more prosperous country, which is sustainable and able to adapt to economic change through preventative and collaborative working. Underpinning all these policies is the need for different sectors, and not least public health, to work together to prevent economic tragedies that can have a devastating and long term effect on communities.

Although this work has been developed with Wales as its backdrop, it draws on national and international examples, and provides a most useful framework of singular importance and global relevance, which can be adopted by other countries facing the threatened or existing scourge of mass unemployment.

This work has met its aims in full measure.



Prof. Sir Mansel Aylward CB
Chair: Public Health Wales



ⁱ1Morris JK, Cook DG, and Shaper AG. 1994. *Loss of Employment and Mortality*. BMJ. 308:1135-1139

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Contributors

We would like to thank the following experts for agreeing to be interviewed and sharing their informed opinions and insights into the impact and response to mass unemployment events. Our interviewees included representation across academia and those involved in the local, regional or national response to mass unemployment events. We thank them for their time, and valued input into this framework.

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1 Executive summary

Downsizing or closure of a single large employer can result in the loss of a high number of jobs from the labour market in a localised area, referred to as a Mass Unemployment Event (MUE).

Whilst governments along with public and private sector partners work to prevent or limit such events, efforts are not always successful. Large scale job losses are not historical but continue to occur across the UK and internationally, as a result of automation, advances in digital and other technology, increasing globalisation of labour markets and changes in the industrial eras.

MUEs, or the threat of such events, can have a marked detrimental impact on the health, social and financial situation of individuals and families in the immediate aftermath, and can destabilise local communities over many generations.

There are clear social, economic and health benefits to proactively responding to these events. Often the focus of co-ordinated responses is on providing training and vocational support to secure re-employment for those made redundant, with minimal or no consideration of the health and longer term consequences of mass unemployment; nor the impact on those indirectly affected including families and the local community.

The impact of MUEs on health and the wider determinants of health, including housing, economic and social circumstances, are comparable to other environmental and major emergency events, such as flooding. Yet, whilst there are recognised public health emergency planning responses to deal with the impact of these acute events, a framework to inform the response to MUEs is lacking.

“...If we only deal with the immediate consequence of redundancy, and only attempt to relocate the individual affected workers, either retirement or retraining, then what we do is we create the foundation for recurring social and economic problems.”

This publication aims to address that gap, and provides a public health informed response framework which takes into consideration the impact of MUEs on the wider determinants of health and the populations affected.

To develop the framework we completed a rapid review of the academic and grey literature, and 12 case studies of responses to MUEs. Often the practical lessons from implementing a response to mass unemployment are difficult to ascertain from the academic literature. To address this gap we interviewed 23 informed individuals across 8 countries, with a range of perspectives, either involved in response to mass unemployment at a local, or national level, or international leaders identified from the rapid review.

Understanding the impact of mass unemployment

The mechanisms by which involuntary job loss, and the preceding period of job insecurity, can have a detrimental impact on health are complex, but likely to be mediated through (i) the direct loss of income and poverty; (ii) the stressful event and subsequent increased anxiety and loss of self-esteem; and (iii) an increase in self-destructive behaviours, such as smoking, alcohol consumption and potentially attempted suicide.

- **Poor health behaviours:** Job loss may exacerbate pre-existing poor health behaviours, such as increased alcohol consumption, tobacco smoking, illegal and prescription drug misuse, and being overweight.
- **Physical health:** Some studies suggest that the risk of hospitalisation and mortality from alcohol related disease, and mortality due to circulatory disease (including myocardial infarction and stroke), and all cause mortality approximately doubled during the first year following redundancy and remained higher up to 20 years later. MUEs can create or exacerbate health inequalities with former heavily industrialised areas disproportionately affected by both deprivation and high levels of incapacity benefits. MUEs have been followed by an increase in the numbers of individuals receiving disability benefits, termed *hidden unemployment* - individuals forced from the labour market due to a mismatch between the labour market needs and the skills of those made redundant.
- **Mental health:** The impact of redundancy on mental health is evident through increased expenditure on antidepressants and related drugs, increased risk of mental ill health, suicide or suicide attempts.
- **Impact on household and families:** The financial hardship, stress of redundancy and forced changes to the family's work and living patterns can have a detrimental

impact including conflict and domestic violence, increased unplanned pregnancy, reduced infant growth, and impacts on spousal and child mental wellbeing. Spouses tend to suffer in silence supporting redundant partners but not receiving support themselves. There is also a risk of intergenerational unemployment and underemployment with long-term consequences for health.

- **Impact on communities:** The loss of a large employer from a community, which has an identity based around that industry and provides generations of workers with self-image and a sense of values, has a significant impact on relationships throughout the community. Following a MUE the loss of community networks and contact with colleagues and friends, can contribute to feelings of grief and social isolation. Although some workers may move away to find re-employment, for others the strength of the connection to community can also be a barrier to mobility.

"It struck me very forcefully that nobody was addressing the longer term impacts in terms of whether that be physical health or indeed mental health." Prof. Davies, UK

A public health informed response to MUEs

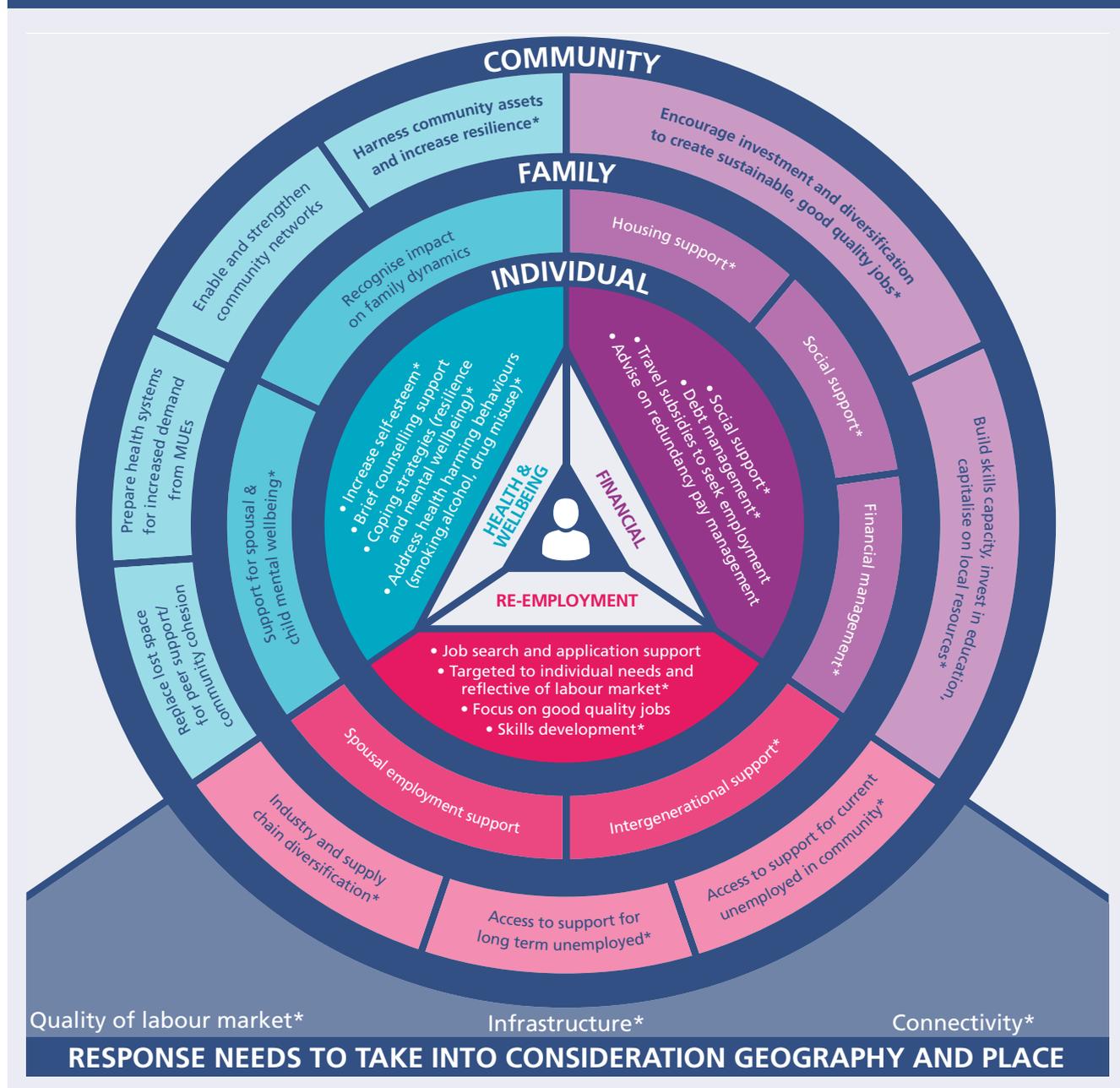
This Public Health Informed Response to MUEs outlines the need to first **identify areas at risk** of MUEs and understand the potential impact; use data and intelligence to **provide an early warning** of MUEs; build relationships with key partners to **mobilise a multi-sector response**; develop tripartite offer of support **addressing the health and social impact**

of MUEs (re-employment, financial and health and wellbeing support) delivered across populations affected including individuals, families and communities; **address the needs of specific groups to prevent widening inequalities**; and lastly to **evaluate, learn and share** to further inform and develop a public health response to MUEs.

recognising that the success of a localised response will depend on the labour market, connectivity and infrastructure of the place but also the history, heritage and cultural aspects that individuals will identify themselves with.

The public health informed response is illustrated in Figure 1 and is grounded in an understanding of geography and **place**,

Figure 1: A public health informed response to Mass Unemployment Events (MUEs)



(*Key aspects of the response which need to be considered before, during and after a mass unemployment event).

The implementation of the framework is supported by eight key steps and localised actions outlined below;

1. Identify communities at risk of MUEs and assess the potential impact (Section 5.1)

- Incorporating mapping of strategic employers in an area, alongside national and global industrial trends, into the local or national public health planning process to help identify areas at risk of MUEs.
- Make use of public health tools including Health Impact Assessments, and the Health Assets Reporting Tool to understand the economic, social and health impact of MUEs and capacity of communities to absorb shocks.
- The impact of a MUE will depend on many factors linked to place, in particular the underlying labour market, geography and connectivity. A reactive response cannot address these factors and a strategic longer-term response needs to be considered within the context of place.

2. Develop an early warning approach for potential MUEs (Section 5.2)

- Draw on both economic trends in the global, national, local labour markets, alongside intelligence gained through good communication with local employers and communities on potential concerns and early indication of potential MUEs.
- Early notification of the scale of the potential MUEs, including the estimated number, skill mix, and geographical spread of workers affected, is crucial to help inform a timely targeted response and quick mobilisation of resources and external support.

3. Early mobilisation of a multi-sector response, including health and community perspectives (Section 5.3)

- Quickly mobilise a multi-sector response which has the necessary powers to act and cascade intelligence across social partners, government, employers, community assets and other stakeholders.
- Ensure systematic representation of health and community partners on the strategic response group to improve understanding of the acute and longer term health risks to communities, and help mobilise resources in health and community to support.

4. Early implementation of tripartite support (re-employment, financial, health & wellbeing) for redundant workers (Section 5.4)

- Deliver accessible support through collaborative links with community groups, unions and employers with a formalised communication strategy to raise awareness about what is available and for whom. Tripartite support should include:
 - i. **Re-employment support:** targeted skills, advice and support, market driven and based on individual needs to achieve good quality re-employment (Section 5.4.1).
 - ii. **Financial management support** (Section 5.4.2).
 - iii. **Health and wellbeing support** including signposting to existing health services, and delivery of psychosocial support (Section 5.4.3).

5. Address the needs of specific groups, including those older and unskilled (Section 5.5)

- MUEs can lead to increasing inequalities in outcomes for individuals in a local community where those with higher education and skills, and the financial means to commute or move away for new employment do so, and those who remain may struggle to find re-employment in an area affected by MUEs.
- Provide tailored support for older workers, those workers who are unskilled, or whose skills do not match labour market demand.

6. Extend support to family members (Section 5.6)

- Family provides vital support for workers undergoing MUE, but are also affected by the shock.
- Extend support offer, including re-employment support, to family members and increase accessibility and awareness of this support.
- Provide health and wellbeing support addressing the risks for families, including children, as a consequence of MUEs.

7. Support the wider community and harness assets (Section 5.7)

- Support the current unemployed to prevent increased risk of marginalisation due to increased competition in the labour market.
- Recognise the potential loss of community identity and support communities to build on local strengths.
- Harness community assets to support others.

8. Evaluate the impact of the response (Section 5.8)

- Examining the impact of the response will help to understand how far original issues have been addressed, as well as inform actions on responses to shocks in the future.

Need for a longer term strategic view

We also asked our interviewees for their reflections on a longer term view to prevent or mitigate MUEs, in order to protect individuals and communities from the adverse effects on health and wellbeing that result. The overarching themes are provided in the table below and reflect elements which need to be considered before, during and after a MUE;

A longer term strategic view

Themes from those interviewed;

- **Skills development** in the workforce is considered an essential foundation for building economic recovery, but needs to ensure that those unskilled are also supported to prevent the generation of widening social inequalities.
- **Investment in infrastructure** underpinned by strong **strategic planning process** from all major stakeholders, in order to lay the foundation for an economic recovery.
- Consideration of whether greater **legislation** or voluntary encouragement of companies to be more socially responsible employers regarding management of restructuring.
- Build **psychological resilience** in individuals and communities to cope with the impact of economic shocks.

Conclusion

Mass unemployment events can have a marked detrimental impact on the health of individual workers, their families and wider communities, the effects of which can be long lasting across generations. MUEs have the potential to create or exacerbate inequalities in local populations, through both the indirect effect on physical and mental health of individuals, alongside the wider societal changes as a consequence of reductions in the labour market and economic and social stresses on the community.

This *Public Health Informed Response to MUEs* outlines the need to provide support inclusive of the health and social consequences of MUEs and to provide such support across the populations affected including individuals, families and communities. Given the clear economic, social and health impact of MUEs, and the current global economic and political climate, this response framework is an important tool to inform action to minimise the consequences, costs and harms of MUEs to population health.

2 Mass unemployment and the need for a public health response

Mass unemployment events (MUEs) can have a marked detrimental impact on the health, social and financial situations for individuals, and can destabilise local communities over many generations(9).

The loss of a significant number of jobs from the labour market can have a negative impact on the local and regional economy, extending beyond the employees directly affected into local businesses, families and communities. A concentration of redundanciesⁱⁱ can result in localised recession(10), leading to long-term detachment from the labour market for those made redundant, with subsequent detrimental impact on the health and wellbeing of those directly affected and their families and community.

Whilst there are extensive public health response plans to deal with the impact of other environmental and major emergency events which can have an impact on health and

economy across populations, such as flooding, a public health response to MUEs is lacking.

MUEs are not uncommon, and are often a consequence of major changes in trade patterns and labour markets due to globalisation or economic and financial crisis, e.g. resulting in company closure or reduction of staff due to transfer of production to another country. Over the past 10 years, the European Globalisation Adjustment Fund (EGFⁱⁱⁱ) has provided funding to support the response to an average of 15 MUEs per year, with an average of 1,046 workers affected by each event (Figure 2). The impact of mass unemployment is also of concern further afield, e.g. car manufacturing in Australia will cease in 2017 across General Motors Holden,

Defining mass unemployment events (MUEs)

Mass unemployment following large industry closure or downsizing is an event which results in a high number of actual or potential job losses from a single large employer, with detrimental consequences for those employees made redundant; a marked impact on the local or regional economy and labour market; and a social shock to the local or regional community.

A MUE may be overnight and sudden (an acute event) or a situation which develops over time and the impact can be both immediate and longer term.

Note: We use the terms “redundancy” and “unemployment” interchangeably for the context of this publication.

ⁱⁱ Redundancy defined as where people are displaced from roles by a change in the business operating model or closure.

ⁱⁱⁱ European Globalisation Fund (EGF) provides financial support for programmes designed to support industry workers made redundant due to structural changes, globalisation or financial crisis. It can fund up to 60% of project costs designed to help workers find alternative employment or set up a business - <http://ec.europa.eu/social/main.jsp?catId=326>

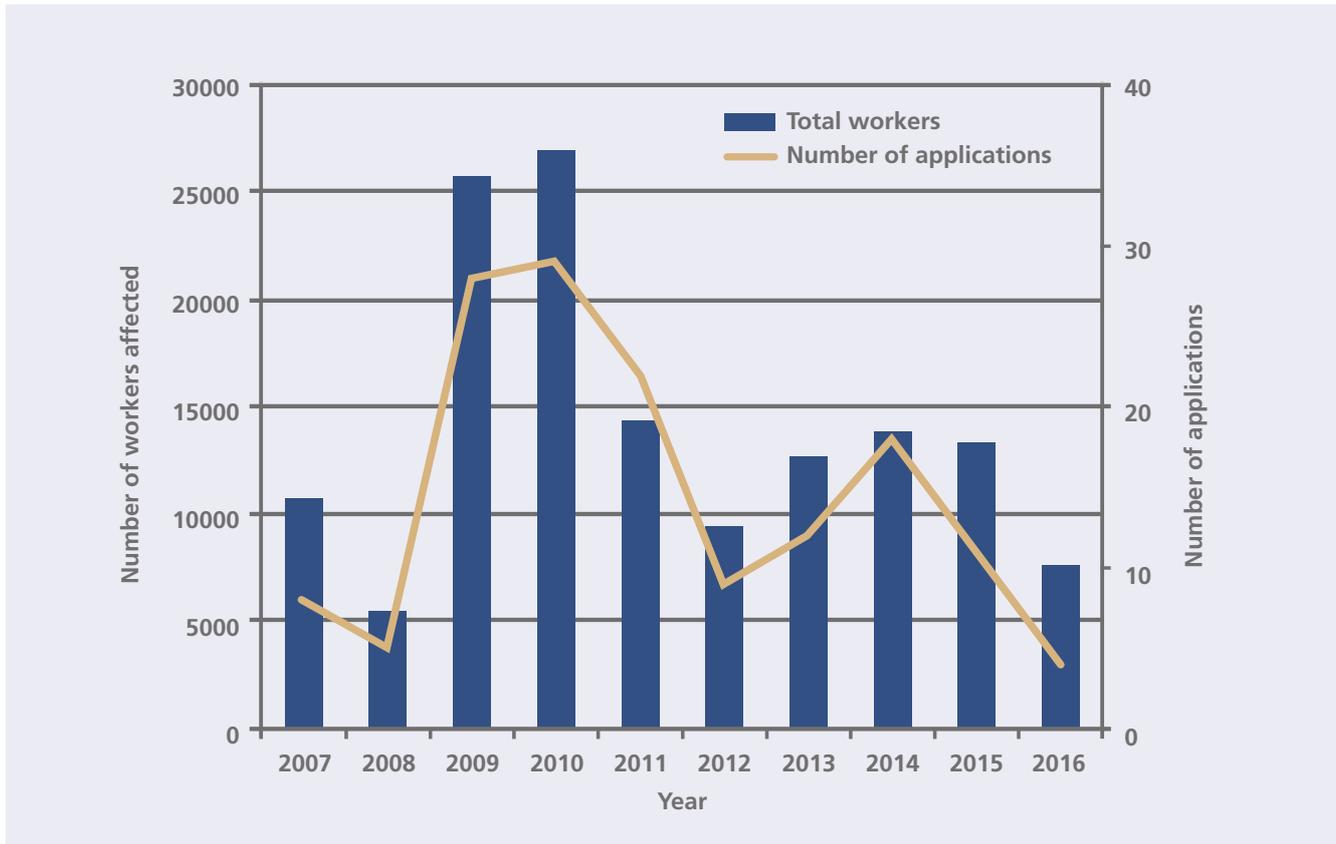


Figure 2: Application for European Globalisation Adjustment Fund (EGF) funding within Europe, and total number of workers affected from 2007 to 2016 (Source: European Commission(12))

the Ford Motor Company of Australia and the Toyota Motor Corporation Australia with potential redundancies exceeding 200,000 alongside a predicted 2% fall in GDP(11) (national estimates).

International and national sustainable development policies recognise the need to ensure that communities are resilient to external shocks, including those that are economic, such as MUEs. **The United Nations Sustainable Development Goals(13)** includes the need to ensure healthy lives and promote wellbeing for all at all ages (Goal 3) and promotes sustainable inclusive economic growth recommending productive employment and decent work for

all (Goal 8). The **United Nations Sendai Framework for Disaster Risk Reduction(14)** includes prevention of new, and reduction of existing disaster^{iv} risk through the implementation of integrated and inclusive measures spanning many disciplines including health, social, education and the economy. One of the **World Health Organization’s Health 2020(15)** priority areas is to create resilient communities and supportive environments, through assessment of health effects of change (including that related to work), followed by action to ensure positive benefits to health. Within Wales, the **Wellbeing of Future Generations (Wales) Act 2015(16)** includes goals to achieve a more resilient Wales and

^{iv} Disaster is defined as: A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts. Hazard is defined as: A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation. United Nations Office for Disaster Risk Reduction (UNISDR), “2009 UNISDR Terminology on Disaster Risk Reduction”, Geneva, May 2009 <https://www.unisdr.org/we/inform/terminology>

a healthier Wales, able to adapt to economic change through preventative and collaborative working.

There are clear social, economic and health benefits to ensuring early identification and support for individuals and communities at risk of MUEs, but often the organised response is limited to training and vocational support to secure re-employment for those made redundant(17). An inclusive framework is needed which extends beyond re-employment, and addresses the health and longer term consequences of mass unemployment at the individual, family and community level(11;17).

This report considers the impact of mass unemployment through a public health^v lens(18), taking into consideration the impact on the wider determinants of health and the populations affected and presents a framework for a public health informed response to MUEs to support action.

The intended audience includes those working in local, national and international public health, in addition to key stakeholders are involved in responding to, or addressing, the consequences of MUEs; including the wider health and care systems, voluntary sector, and local and national governments.



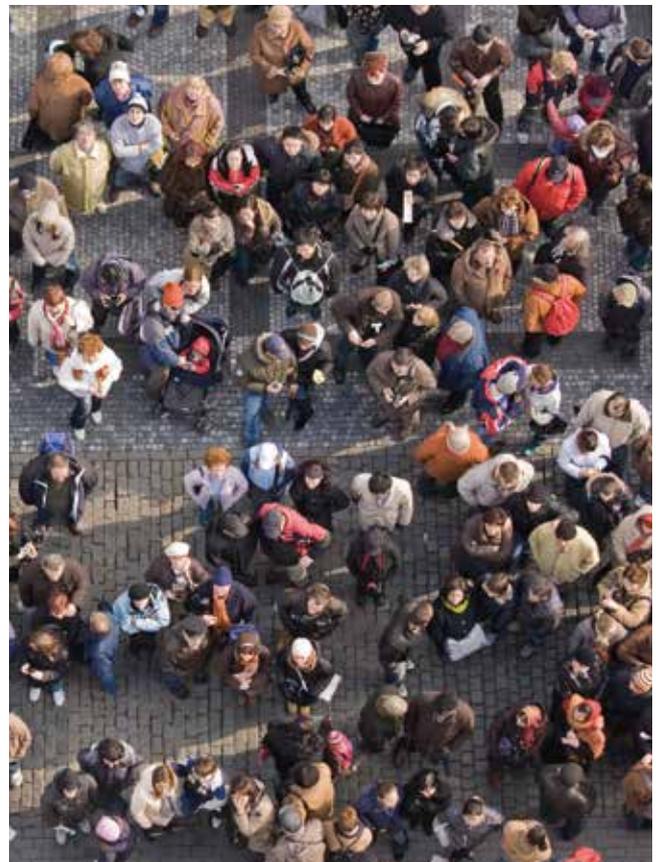
^v Public health is defined as “the art and science of preventing disease, prolonging life and promoting health through the organised efforts of society” (Acheson, 1988)

3 Developing a framework: our approach

To inform the development of the framework we completed a rapid review of the academic and grey literature (Appendix A), and 12 case studies (Appendix B), bringing together the evidence on the impact and responses to MUEs.

Often the practical lessons from implementing a response to mass unemployment are difficult to ascertain from the academic literature, and questions remain including *How was health and wellbeing considered in the response? To what extent were families and communities supported?* To address this gap we completed a series of semi-structured interviews (60 minutes) with 23 informed individuals across eight countries, with a range of perspectives, either involved in response to MUEs at a local or national level, or international leaders identified from the rapid review (see contributors list). Our informed contributors drew on their own experience and knowledge of responding to MUEs. All interviews were recorded, transcribed and analysed thematically^{vi}.

This report is not a systematic review, but seeks to bring together the evidence from published literature and insights from leading experts and those with experience in responding to MUEs. It is hoped that the framework will help support comprehensive public health informed response to current or future MUEs which better respond to the challenges faced by and needs of individuals and communities facing MUEs.



^{vi} Thematic analysis completed with ATLAS.ti Version 7.1. [Computer software] (2013) Berlin, Scientific Software Development.

4 Understanding the impact of mass unemployment on health

An overview of the impact of MUEs on the health and wellbeing of individuals, families and communities is needed to help inform the public health response to MUEs. Work and health are intimately related(19).

Unemployment contributes to ill health and poor health increases the likelihood of unemployment, and the two can become mutually reinforcing(3). Being in good employment is of critical importance for reducing health inequalities; being or getting back into good employment is protective of health(3). Long term joblessness has detrimental consequences to the health and wellbeing of individuals, their families, and their communities; and barriers to a life in work need to be tackled by society as a whole(19). Work forms a large part of most people's lives, bringing with it financial rewards but also a range of other benefits to individuals including identity, social roles and status, meeting psychosocial needs of confidence and self-esteem(19).

The mechanisms by which involuntary job loss, and the preceding period of job insecurity, can have a detrimental impact on health are complex, but are mediated through (i) the direct loss of income and poverty; (ii) the stressful event and subsequent increased anxiety and loss of self-esteem; and (iii) an increase in self-destructive behaviours, such as smoking, alcohol consumption and potentially attempted suicide(20).

4.1 Effect on poor health behaviours

Job loss may exacerbate pre-existing poor health behaviours, such as increased alcohol consumption, tobacco smoking, illegal and prescription drug misuse, and being overweight (21-27). A six year longitudinal study, using the European Health and Retirement Survey, found that job loss among people aged 50 to 64 years was associated with increased consumption of alcohol and increased risk of hazardous drinking in comparison to individuals who remained employed(26).

Redundancy from industry closure and the resulting financial consequences may, for some individuals, have some minor protective effect through reduced purchasing ability and consequently reduced self-reported alcohol consumption and smoking consumption(30). However, in another study involuntary job loss was associated with increased smoking and doubling the risk of relapse amongst ex-smokers(24).

4.2 Effect on physical health

Mass unemployment can lead to a decline in overall health and wellbeing, both in the period of anticipation and in the short and longer term following the event(28;30;31).

“Kasl and Cobb... at Yale University ... proved or showed that it was effects of closure from even [when] the message had been given, when blood pressure is increasing, cortisol levels increasing, anxiety levels are increasing, so things start to happen even before the actual lay-off.” *Prof. Westin, Norway*

Becoming unemployed significantly increases the risk of hospitalisation due to alcohol-related diseases(28) in both men and women(25;29), with suggested gender-specific effects of age and marital status(25).

In a large Danish study of redundant male workers, a higher risk of mortality from alcohol related disease was seen (2.6 times higher during the first year of redundancy, 1.7 times higher during the first four years), and a smaller remaining risk could be seen up to 15 years, suggesting a long-term effect of job displacement(29). Increased hospitalisation from alcohol related disease was identified (1.8 times higher during the first year of redundancy, 1.3 times higher during the first four years)(29); and in two separate studies the risks remained for 12 to 20 years (1.2 times higher)(25;29).

Involuntary job loss caused by industry closure has been found to increase the risk of circulatory and cardiovascular disease(30), although the effect on hospitalisation is less clear(25;29). In a Danish study the risk of mortality due to circulatory disease (including myocardial infarction and stroke), was 2.3 times higher in the first year following closure and 1.6 times higher during the first four years, with a significant effect remaining 20 years later (1.2 times higher)(29). Additional studies have reported a more than doubling the risk of self-reported stroke(32;33) and myocardial infarction(33) following job loss in older workers (aged over 50 years).

A controlled study from the UK showed that long-term redundant workers consulted their GPs 57% more often, regarding 13% more illnesses, and were treated at hospital more often (outpatient referral is 63% higher, and hospital attendance 208% higher) compared to those who had found re-employment(28).

“On the physical health, what we saw was that they had been manual workers, were very active and therefore very fit, and they moved from being in that very fit workplace that kept them fit, to basically catching the 21st century disease of being overweight and unfit.”
Prof. Beer, Australia

The impact of MUEs may differ by age and sex. Older workers are at greater risk of cardiovascular and cerebrovascular disease(32;33), male workers aged 35 to 49 years experienced a 40% increase in risk of hospitalisation due to stroke compared to younger workers(25). One study suggested gender difference where women are more likely to have poorer general health and increased numbers of chronic conditions, whereas men are more likely to be depressed(34).

The effects on physical health can also be long lasting. For example, in the ex-coalfield communities in England, poorer health outcomes remain decades after the mass deindustrialisation of the 1980s and 1990s, with higher prevalence of long lasting illnesses regardless of socio-demographic and area-level characteristics(35). As such MUEs can create or exacerbate health inequalities(19). Former heavily industrialised areas of south Wales, northern England, and central Scotland are disproportionately affected by both deprivation and incapacity benefits, suggesting an association between social gradient and health(19). These areas of higher deprivation also suffer from higher mortality rates, limited life expectation, reduced years of freedom

from disability, and long-term illness compared to less disadvantaged areas(19).

In some countries, MUEs have been found to increase the numbers on disability benefits(36-39). For example, five years following the closure of a Sardine factory in Norway, the proportion of redundant workers receiving disability support (for conditions such as back pain, insomnia, anxiety and depression) was three times higher than those who remained employed in a nearby sister factory – an effect which remained for ten years after the closure(39).

“... [MUEs] do have much longer term effects on social readjustments, on unemployment rates, on the use of social security support, much more and much longer than you would generally think.” *Prof. Westin, Norway*

Although unemployment and redundancy do contribute to the deterioration of health(39;40), the increase in disability benefits post MUEs is not all due to ill health(36). A proportion of these cases are due to increased competition in the labour market, and a mismatch between the labour market needs and the skills of those made redundant. As a result individuals leave the labour market with reliance on social support(37;40), termed the **hidden unemployed**.

Hidden unemployment represents the long-term loss to the workforce of those who would otherwise still be economically active, following a mass unemployment event. This may be a consequence of readjustment in the labour market and a mismatch between the labour market needs and the skills of those made redundant.

4.3 Effect on mental health and wellbeing

The detrimental impact on an individual’s mental health and wellbeing(36;41;42) can include loss of self-esteem(21;42), increased anxiety(43) due to unemployment and consequential financial hardship(40;42), and loss of individual and collective identity.

The period of job uncertainty that precedes the MUE was noted to be particularly challenging.

“...the anticipatory phase where people know they’re losing their jobs or they think they’re losing their jobs, they don’t know what they’re going to do in their lives and they have no sense of control over their kind of lives at all.” *Dr Elliott, UK*

The loss of an individual’s occupational identity following industry closure and associated collective identity(44) and social support networks, can have a detrimental and long-term effect on both an individual and wider communities mental wellbeing (Section 4.6).

“...there’s a sort of almost an unstated trauma that can never, people never get sort of over.”

The impact of redundancy on mental health is evident through increased expenditure on antidepressants and related drugs(36), and an increased risk of mental ill health, suicide or suicide attempts(29;38). In a study of workers who experienced involuntary job loss from a meat processing factory in New Zealand, the risk of hospitalisation for serious self-harm was 2.5 times higher amongst redundant workers in the 8 years following job loss compared to those who remained in work continuously(45).

In a large Danish study of male workers affected by MUEs, the risk of hospitalisation due to mental ill health was 1.6 times higher one year after redundancy, and 1.3 times higher in the first four years; and the increased risk remained for 20 years(29). The study also found an increased risk of mortality from suicide (3 times higher during the first year of redundancy, 1.6 times higher during the first four years)(29).

“...in terms of the effects of unemployment, [the effect] on mental health, was that we might see changes in the pattern of suicide, and unfortunately we have.”

Dr Brunton, New Zealand

In a qualitative study of Mitsubishi workers made redundant in South Australia, mass unemployment contributed to feelings of stress, changes to perceived control, loss of self-esteem, shame and loss of status, experiencing a grieving process, and financial strain(42). A qualitative study of ex-steel workers in Wales found that workers reported depression following redundancy(27).

Not all groups are affected the same way, with age and gender differences evident. Men were found to be more likely than women to be depressed following industry closure(34), require hospitalisation for mental illness(34), more likely to self-harm(25) and found it more difficult to cope with the effects.

“...community psychiatric nurses were talking about how local women locally would come to them because their men were too reticent to seek help if they were feeling stressed, anxious, as they would provide informal kind of support for the women to support the men...” *Dr Elliott, UK*

4.4 Effect on mortality

Evidence suggests that immediately following redundancy the risk of mortality is higher and this elevated risk can remain over a longer period, although slightly attenuated. Areas in the UK, affected by closure of coalfields have shown higher mortality levels when compared to areas that are more prosperous and less dominated by manufacturing and industry(46). Moreover, poorer health outcomes are evident 20 to 30 years later(35), with both outcomes likely to be exacerbated by varying socioeconomic determinants.

In other examples, a large Danish study of male workers made redundant following industry closures between 1986-2002, the risk of (all cause) mortality was 1.8 times higher during the first year of redundancy, 1.4 times higher during the first four years, compared to a control group of workers from non-closing factories, and the increased risk remained up to 20 years later(29). Similarly, a large study from the US, found death rates among redundant male industry workers were 15 to 20% higher compared to workers with similar characteristics who remained employed(47). The authors estimated this would equate to a reduced life expectancy of up to two years amongst those made redundant at an age of 35 years(47). The effect was associated with persistent losses in earnings over a lifetime following the initial MUE, with those workers at greatest risk of reduced life expectancy(47).

The association between MUEs and mortality are likely to reflect the impact of redundancy on both an individual's physical and mental health, as well as the accessibility of underlying social welfare and healthcare systems, and the overall context including the wider labour market(25;29).

4.5 Effect on household and families

There are strong economic and social arguments that work is the most effective means to improve the wellbeing and health of individuals and their families(19). Studies of former coal mining areas report that the financial consequences of redundancy led to difficulties repaying mortgages and increased accumulation of debt, resulting in workers facing house repossessions, long lasting financial hardship, reliance on social support, and constrained access to food(21). Home ownership has also been suggested as contributing to reducing the rate of re-engagement with the job market, through a lack of locally available jobs, a prohibitively high cost of commuting out of the local area for available work(48). This financial strain is likely to have a cumulative effect on the health and wellbeing on workers and families, affecting their ability to recover from the event.

“So the local Salvation Army food bank saw an increase. And people coming to the food bank who they would have never have seen before... families that previously wouldn't have needed their service.” *Dr Brunton, New Zealand*

Unemployment can have a wider impact on the household and family members; adverse effects reported have included increased conflict and domestic violence, increased unplanned pregnancy, and reduced infant growth(21). Financial hardship has been shown to contribute to spousal and child ill-health, affect parenting, and result in poorer child mental health, and reduced educational attainment(21;23;38;49).

Families of redundant workers are affected by the event through ‘spillover effect’. Spouses of displaced workers tended to **suffer in silence**, carrying a great emotional burden

of supporting their spouse and keeping the family together, while not receiving support themselves(27). **Spousal mental wellbeing has been found to be affected almost as much as the worker’s**(50). Some families may need to make major changes to work and living patterns as a result, such as redundant workers having to move away or commute longer distances for future employment.

“...so they leave for periods of time and then come back every three weeks or every four weeks for a week and then go again. And that just means that the household is left by itself...”

“...all the jobs offered were not in the local community where they were close to their families and could get food for the children... when they came from school.”

Prof. Westin, Norway

Partners take up employment when previously they did not work, in turn resulting in major changes to the family dynamic and relationships.

“...relied on their partners and the women to bring in money to support them, and was viewed as emasculation.” *Dr Stroud, UK*

The potential adverse effects on children within the family unit include impact on mental wellbeing, education and future aspirations, as well as bonds within the family structure.

“...because they had less money, the fact that they had to use their savings... they have started to change some of the plan in terms of their kids going to university...”

“...they’ve got kids starting school at five with anxiety...it’s impacting on children starting school and feeling stressed because of stress in the family.” *Ms Harvey, New Zealand*

“...we wanted to propose some work with fathers and sons to actually bring the generations together because there was this sense of a kind of severing or breaking of the generations which I know other people say is quite common in these communities.”

Prof. Walkerdine, UK



These views are supported by evidence suggesting that children whose fathers have been made redundant do significantly worse in terms of their educational attainment, and are likely to have increased unemployment(51).

Intergenerational impact

Unemployment, job insecurity, and lower earnings are thought to lead to health disadvantage that accumulates through a person’s life, and this can have a long-term and intergenerational effect(45;51). An increase in disability benefits in old industrial regions has been seen to pass from one generation to the next(37) highlighting the risk of intergenerational unemployment and underemployment. A reliance on benefits can cause a ‘low-skills trap’ that leads to unemployability(19;38) and the risk of a ‘culture of worklessness’(40).



“The generation behind the miners and the steelworkers have ended up on these benefits. If they’ve got health problems, if they’ve got other difficulties in accessing work...people who are perhaps in the second half of their working lives who have poor qualifications or no formal qualifications, have only low grade work experience of what they’ve been doing. They’re not going to be an employer’s first choice... and they end up being parked on incapacity benefits. So you’ve got this huge, huge surge in recorded ill-health on incapacity benefit in the old industrial areas. It’s one of the dominating... it is the single dominating feature of the labour market in these places.”

Prof. Fothergill, UK

There is particular concern that the combination of few jobs and family financial hardship disproportionately disadvantages young people not in education, employment or training (NEET). A period of unemployment in young men under 23 increases the likelihood of future unemployment and a cycle of no work/ low wage, compounded by poor educational attainment that can have a life-course impact (21;51).

4.6 Community impact: loss of cohesion and identity

Communities that are highly dependent on a single industry are often defined by it. The industry provides generations of workers with identity, a sense of values, and a reference group that can influence the relationship between themselves, their family and community which lasts a lifetime(52).

Community cohesion

Often large industries have a centralised role in the community, including organisation of social and leisure activities that are closely linked to maintaining work relationships and crucial in providing a sense of belonging. This collective community can be a source of strength and support during the MUE.

“There was a lot of talk about being a big family, no matter how much that was romanticised, it was all a set of strategies for coping really...So what you have to understand is the absolutely devastating effect of all those things going.” *Prof. Walkerdine, UK*

However, MUEs can also lead to the loss of community networks, contact with colleagues and friends, and can contribute to feelings of grief(52;53) and social isolation(21;53). Maintaining social connections for ex-workers is difficult as other priorities take place such as managing financial and job-related worries (21;53).

“...you stay at home and, and you isolate yourself from the other world and you think you are the only one unemployed...” *Prof. Ylikännö, Finland*





Some workers travel further to find new jobs and spend less time in their local community, or move permanently for work, weakening social networks and community cohesion(52).

“...they can’t support each other in the same way anymore because those kinds of patterns of daily life aren’t there in the same way anymore.”

Prof. Walkerdine, UK

For many, the strength of the connection to community means workers are reluctant to leave to find new employment, and this can be perceived as a barrier to mobility.

“So it seems to me as much about those communities and the allegiance to them, the family, the generations that are there. People want to stay in those places...” *Dr Stroud, UK*

“...a strong feeling amongst many people that we interviewed is that you can’t go to other communities because other communities will look after their own. We look after our own, they’ll look after their own, so you can’t go there because they’re already looking after their people.”

Prof. Walkerdine, UK

Community identity

“...you get people talking about the heart ripped out of the community...”

Dr Stroud, UK

A community that has at its heart an identity based around a single large employer, that has provided generations of workers with self-image, a sense of values, and a reference group, loses this following the disappearance of that industry, with strong impacts on relationships throughout the community(52). Often a sense of grief over the loss of the industry is reported(44;53).

“...lack of community connectedness now and the lack of identity and actually, yes, this is our history, but how do we look to, what does the future look like...because there is no future in mining.” *Ms Harvey, New Zealand*

Studies of ex-coal-mining communities in Wales specifically noted the decline in community participation and community organisations following the trauma of MUEs(21).

“...people felt like their towns had changed and it was just, the last straw, or as they kept saying, the last nail in the coffin.” *Dr Elliott, UK*

A community undergoing MUEs is also significantly affected by structural changes to employment. Particularly a forced transition from jobs-for-life to casual employment or difficulties in re-entering the labour market, that is closely associated with broader impacts

on communities, including economic(41) and community identity.

"...important issues ... related to what the loss of steel work meant for the community on a longer term basis and what I came to understand was a real sense of trauma and loss across generations, that manifested itself in a number of different ways."

Prof. Walkerdine, UK

"But the problem was that the guts had been torn out of the community by the loss of income, the loss of its understanding of itself.."

Dr Delahunty, UK

A qualitative study explored the experiences of steel workers in South Wales after a MUE, captured accounts of their families, spouses and children, and compared results to similar work in Sydney, Australia(27;54). The research reported that worker and community identities are challenged in the light of shifting labour market. The Australian sample were less bound by their old community identity and more open to change, compared to the workers in Wales who were more reluctant to move away from the safety of their community and less embracing of change, highlighting the importance of place and context for a sense of identity and support(27). All workers regarded redundancy as a crisis, and age was an important factor in how they faced the situation. Workers aged over 40 were more apprehensive about change and finding work, and men aged over 50 were more likely to feel this was now the end of their working life(27).

Communities affected by industry closure often reflect on the resulting population changes, such as changes in age composition,

arrival of new residents as well as foreigners, and an increase in the number of rental properties(41;52). Communities seem to experience a struggle between adapting to change and efforts to retain community identity and connections(38;41). Ex-workers and families often express a strong adherence to working class community values and the old community offering feeling of safety(54).

"...we don't know a lot of the people who live here now, because it has changed, so, some people have moved away and there are empty houses because they've had to go and work somewhere else...it's not the same little tight community that it used to be." *Ms Harvey, New Zealand*

Individual identity within a community can also be affected due to the loss of status and masculinity associated with specific roles held prior to the MUE(52), particularly older men who have lost the job-for-life that they expected to continue in until retirement(39;41).

"It was the camaraderie of this very male-oriented industry which was important to them ... something that people said all the time, how are men going to cope when there was nothing in the economy that they felt, as a man, that they could go to, going from a proud steelworker to, as people said, stacking shelves [in a supermarket]." *Dr Elliott, UK*

4.7 Community impact: labour market and economy

The loss of a large dominant employer in a local community can make a significant reduction to the local labour market for many years, and with detrimental consequences for the local economy.

Increased competition for employment and impact on the already unemployed

Closure of a large employer may put even more pressure on existing long-term unemployment in a community. Those already unemployed face competition from more qualified workers with recent experience who are seeking employment following redundancy, in a labour market with fewer jobs available.

There is a disproportionate impact of redundancy on social inequalities, affecting access to the labour market, with these groups being less likely to move or travel away from the community to find work(41). Rates of unemployment are highest among those with no or few qualifications and skills, people with disabilities and mental ill-health, those with caring responsibilities, lone parents, those from some ethnic minority groups, older workers and, in particular, young people(3). When in work, these same groups are more likely to be in low-paid, poor quality jobs with few opportunities for advancement, often working in conditions that are harmful to health(3). Many are trapped in a cycle of low-paid, poor quality work and unemployment(3).

The long-term unemployed are at a disadvantage, as often they are not eligible to benefit from recovery packages put in place to specifically support the recently redundant workers. The long-term unemployed are also likely to be less attractive to employers compared to those who, up until recently, were actively employed. Two years following the closure of MG Rover the majority of redundant workers were back in employment but the levels of unemployment in the

area remained higher than their original number(41). Therefore, unemployment levels in a community may remain elevated for years following industry closure(41).

“...able, reasonably well trained and well-motivated people that get made redundant, they are retrained in something else, and they then get a job. The job that they take might otherwise have gone to somebody else in the local labour market, so the unemployment is passed from one individual to another.”

Prof. Fothergill, UK

Redundant workers may be forced to access regional labour markets to gain competitive, better quality re-employment, and re-employment may depend on their ability and willingness to travel(55). Therefore, the impact on competition for jobs is likely to be geographically spread, and not limited to the communities adjacent to the employer who made the redundancies(41;55). The long-term effect of skilled and young people migrating out of the affected area, makes the area less appealing to new industries.

“...the out-migration of a skilled workforce to look for work and then there’s that. Then there’s the out migration of young people as well, if there continues to be no employment.” *Dr Plows, UK*

Wider economic impact

The loss of a major employer from an area can have a detrimental economic impact on local business activity both through loss of income to the businesses that are part of a wider supply chain and local shops and cafes frequented by the workforce.

"...there are no visitors and the cafes are all shut and ... even the pubs are closing, that's a really bad sign, because, there's no social hanging out." *Ms Harvey, New Zealand*

"...not only are you taking that plant away and the work that goes with it and the remuneration that goes with it, and that spending power that supports that community, but it's the supply chain as well. The businesses that rely on people working there to then go off and spend their wage, so the whole thing collapses." *Dr Stroud, UK*

Research from resource dependent communities observed a spatial movement within the population in order to find work, including families, young people and community leaders, leaving the local business and services at a loss(56) potentially leading to a gradual population loss, as workers may be forced to seek employment elsewhere(23).

Housing tenure is likely to have an impact on the spatial mobility of workers, where one barrier to migration is the housing market and affordability of housing(48). In some areas of Birmingham affected by the closure of MG Rover, it was reported that local house prices dropped from 93% to 75%, compared to the regional average. The resulting financial strain caused by the devaluation of homes was likely to affect the readjustment process of the community(57).



Wide geographical spread of the impact

There may be a much more regional and sub-regional impact of job losses, rather than a local centralised effect. A study examining the community impact of the MG Rover closure reported significant spatial distribution of the MG Rover workers(41). The relatively well-paid working population was quite spread out geographically with many workers commuting to work daily from their homes in the suburbs, so the impact of the MUE on housing and communities was widely distributed(41).

"Of course with the travel to work area being so large now, it isn't just [the local area] that's affected, it's [areas] further afield." *Prof. Davies, UK*

4.8 Need for a comprehensive approach

Periods of job insecurity and resulting in redundancy following industry closures have been shown to be associated with increased health harming behaviour(21;25;29), increased chronic ill health(19;28;30), adverse effects on mental health(19;25;29;36), increased use of primary and secondary care services(19;28), and increased excess mortality(19;29), including from circulatory disease(25;29;30).

The detrimental impact on health is evident in the period of anticipation, leading up to potential redundancy, and can last for many years later; in particular for older and unskilled workers who can find it more difficult to obtain jobs in the future(41).

The impact of the MUE reaches beyond individual workers to the family and community. Redundancy can result in direct financial hardship for the family household, and have a detrimental impact on spousal mental wellbeing and family dynamics, and increase the risk of long term unemployment from one generation to the next.

A community with a strong sense of identity and cohesion linked to an industry can provide support at times of adversity; but MUEs can also disconnect social networks within communities and to some extent result in the local population experiencing emotional trauma. The impact can extend to local businesses and supply chains, resulting in a period of deprivation, and increased competition in the local labour market for the already unemployed.



The detrimental impact of MUEs on the health of workers, their families and the wider community both in the time of uncertainty leading up to an event, and over the longer recovery period is supported by evidence from past events. A response framework which addresses the consequences of MUEs across populations could help mitigate the consequences of MUE on the health and wellbeing of individuals, families and community.

“If we only deal with the immediate consequence of redundancy, and only attempt to relocate the individual affected workers, either retirement or retraining or whatever, then what we do is we create the foundation for recurring social and economic problems.”



5 A public health informed response to MUEs

The impact of MUEs will vary depending on the underlying context of the local economy and labour market, the characteristics of the individuals and communities involved, and connectivity of the local area. Taking this into consideration, and drawing on the evidence base and expert opinion we present an outline for a public health informed response to addressing MUEs.

The response reflects both the preparedness (Sections 5.1-5.2) and response stages (Sections 5.3-5.8) following a MUE.

5.1 Identify communities at risk of MUEs and assess the potential impact

Proactive identification of areas at risk of MUEs, where a large number of jobs rely on a single employer, is a key step to informing early action to prevent or reduce the scale of such an event, and prepare a response to mitigate against such impact.

Early identification of potential industries at risk could enable diversification into sustainable areas of employment, alongside investing in local entrepreneurship and sustainable social enterprises to strengthen the local market.

Understanding the labour market

Incorporating mapping of strategic employers in an area, alongside national and global industrial trends, into the local or national public health planning process is essential to identify areas at risk of MUE. Robust economic forecasts at a national or regional level are a useful source of information to inform planning, such as the UK Regional Economic Forums(58;59), or the Welsh Government identification of ‘anchor’ companies of specific global and international importance with a significant presence in Wales(60).

“There could have been a lot of thought towards what kind of skills and industries were going to be needed or appropriate for the future of Britain, Wales, and how they could begin to adapt or support people towards, if you could identify what employment opportunities are most likely to be... but one of the problems was that everything that was brought in was very low-skilled, low-pay and not with the commitment or with any roots within the local community.”

Dr Delahunty, UK



The impact of a MUE is largely determined by the local economy, labour market and connectivity of the local area.

A strong economy and labour market enables workers to find re-employment more quickly compared to MUEs in areas or time periods which already have relatively high levels of unemployment and social disadvantage(11). Mass redundancy is somewhat determined by the ability of the local labour market to absorb redundant workers.

“I think almost all, from memory, at the time all the people who wanted jobs were able to get alternative employment and in many cases if not most at higher levels of pay. So the labour market was quite buoyant at that time.” *Prof. Davies, UK*

“If we inject another 1000 workless people into an environment where we’ve already got 9% of the work force unemployed, 35% of the economically inactive and a large proportion who were on incapacity benefits and health related benefits. There were 110 vacancies at the job centre at the time. So we were dealing with a very, very weak labour market. Everyone threw up their hands in horror really at the thought of what was about to happen.” *Mr Slater, UK*

“People kept saying it was the last nail on the coffin because, you know, it had been an area of relatively high unemployment some time ago, [it] was the last major employer and it paid relatively well, ...so it was terrifically important for the economy.”

Dr Elliott, UK

Geography and connectivity

Affected areas that are more isolated, with less infrastructure and transport connectivity, are likely to suffer most, in particular if reliant on a single large employer. The infrastructure and connectivity to surrounding job markets can determine the speed of regeneration of the area affected by mass redundancies. Quality of infrastructure is important as it enables workers to travel to access labour markets; and it is useful to attract new businesses into the area(61).

“One of the things that strikes me is infrastructure and so when people were talking about the closure...it’s quite well connected...it depends on that kind of locality, on the infrastructure that’s there, it would be easier [to attract new employers].”

Dr Stroud, UK



There are also differences in impact depending on the quality and size of the labour market available to the local community, for example a city having a larger labour market, whereas in a smaller area there are fewer options.

“How many small business of plumbers can [a local] economy ... actually support. ... it’s important to look at what is underlying the economy and what policy impacts are there and what employment opportunities are there. If there aren’t employment opportunities it doesn’t matter how resourceful you are, unless you move away.” *Dr Plows, UK*

Assess the health and mental wellbeing impact

For areas at risk of MUEs, using available tools to **understand the potential economic, social and health and mental wellbeing impact of such events** (Box 1). This assessment should include consideration of the assets and resilience within local communities to absorb such shocks. This is essential information to help inform preventative action to protect and support communities at risk. **Sharing information about the health impact with strategic partners can help improve understanding of the impact and orientate collective action.** For example, the North East Economic Model estimated the effect and scale of the impact of the potential Alcan Lynemouth smelter closure in Northumberland on the local area and associated supply chain businesses to inform action(62).

Box 1: Public health epidemiological tools which can be used to understand the potential impact of MUEs

Health Impact Assessment (2)

A systematic, objective, flexible and practical way of assessing both the potential positive and negative impacts of a proposal on health and wellbeing and suggests ways in which opportunities for health gain can be maximized and risks to health minimised.

Mental Wellbeing Impact Assessment(6)

A systematic framework which assesses the potential for a policy, service, programme or project to impact on the mental wellbeing of a population.

Health Assets Reporting Tool, Public Health Wales Observatory(8)

Asset based mapping across small geographical areas of individual, community and structural assets for health and wellbeing including;

- a) **People/Individual Assets;** Life Satisfaction, Health and Wellbeing Status, Education, Material and Financial Wellbeing.
- b) **Community Assets;** Family Cohesion and Relationships, Social Networks, Effective Services, Neighbourhood satisfaction.
- c) **Structure (Organisational and Institutional) Assets:** Buoyant Economy, Open Environment, Built Environment.

5.2 Develop an early warning approach for potential MUEs

Developing an early warning system before MUEs occur is an essential step to help early identification of the need for action, and could be carried out by local Public Health leaders (e.g. Directors of Public Health) in collaboration with local and national Government industry links.

An early warning system needs to draw on both economic trends in the global, national and local labour markets, alongside intelligence gained through good communication with local employers and communities (Box 2).

“Economic impact assessments help you understand the extent of the impact throughout the local economy and sub-economies. Modelling tells you part of the story, conversations with companies gives you an indication of what the real impacts are likely to be given different circumstances - a complex story, depending on how complicated the supply chain is.”

Prof. Spoehr, South Australia

Early notification of scale of the potential MUEs, including the estimated number, skill mix, and geographical spread of workers affected, is crucial to help inform a timely reactive response and quick mobilisation of resources and external support(10).

“Then use all that intelligence to craft a response.”

Prof. Spoehr, South Australia

The final number of redundancies may not equate to the number initially announced due to declaring a safety margin reflecting the maximum number that could be made

redundant, including turnover (employees choosing to leave prior to redundancy), and mitigation via industry or public sector intervention(10).

Open communication with industry to inform a timely and appropriate response may be challenging.

In Austria employers are obliged to provide early information on any redundancy plans to inform action(58). Recognition of international companies **corporate responsibility**, and potentially a commercial reason to protect their reputation, may help facilitate engagement(9). For example, early engagement between the Department of Trade and Industry and MG Rover (UK) about the difficulties the company faced enabled economic analysis of the impact, detailed contingency planning and mobilisation of re-employment support to address the needs of over 80% of redundancies made within the first week of the closure announcement(10).

“Most companies or a large number of companies, especially the big multinationals, can plan for these events and as a result can help [workers] get the skills, give them labour market advice about what they need. Most responsible companies would do that and what’s important is time and planning and giving people the skills.” *Prof. Blackaby, UK*

“We knew they were going to close and if they had worked with us for a year or so it would have helped, considerably in terms of planning and responding to the eventual job losses. It’s one of my criticisms of business really is they’re very short term in their thinking.” *Prof. Davies, UK*

Box 2: Sources of information providing an early warning of a mass unemployment event

- Collating relevant information held by different agencies at a national and sub-national level to develop a surveillance system (e.g. employment levels, uptake of social support, regional economic forecasting, sectoral trends, screening financial markets and exchange rates).

“So quite often the first inkling that there was a problem will come from the economy side and they’ll pick up the phone to one of us and say, ‘look, I’ve heard a rumour’.”

- Proactive intelligence on strategic employers in an area to identify early warning signs (e.g. reduced investment, new plants opening in other countries, reduction in production lines).

“[The company] had already incurred very significant cutbacks in the workforce over the years.” *Mr Slater, UK*

“...identifying which companies were likely to close and which weren’t, has been valuable in informing decisions and targeting support.”
Prof. Spoehr, South Australia

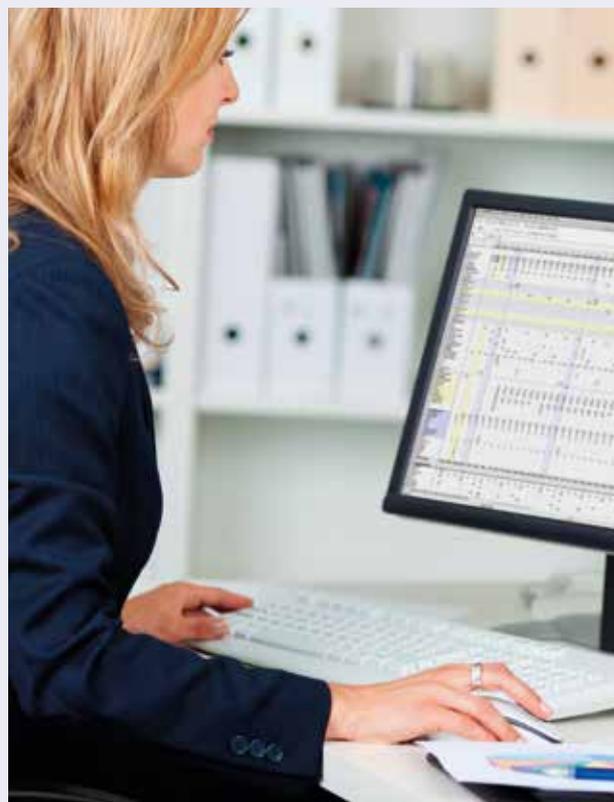
“A number of us were deeply concerned, the operation had been scaling down to an extent for some time.”
Prof. Spoehr, South Australia

- Build effective relationships with large employers to facilitate early communication of challenging times ahead.

“Definitely engaging with the company itself and the workforce.” *Ms Lake, UK*

- Other community sources of local intelligence can offer the first indication of a concern (e.g. news reports, links with trade unions, professionals in the community).

“We had the local community as our patients and people were coming down and expressing the anxieties.”
Prof. Westin, Norway



When possible, **early consultation with industry** should provide information about the redundancy criteria process, details on redundancy payments, how long the process will take and what on-site support those affected will be able to access. This information can be used to inform the support programme provided. **Transparency of the announcement is important**, as is the approach to delivering the information to the workforce to help address concerns and insecurities early.

“How the closure and the redundancies were made which management were quite strategic on that. They wanted to have control over it, and this meant I think that it created insecurity and of course if you’re being made to feel insecure it’s going to have some effect on your family life and such like and that was apparent.” *Dr Stroud, UK*

5.3 Early mobilisation of a multi-sector response

Mass redundancies can be considered as an extraordinary event that places inordinate pressure and risk on organisations, local services, employees, and the wider community. Adopting an **emergency planning approach** ensures:

- (1) relevant key stakeholder organisations are identified by public health/local government beforehand and a co-ordinated response can be planned, prepared, and practiced with clear roles and responsibilities, and
- (2) a system for communication and action is quickly put into place so that the response is as effective as possible, in order to mitigate the effects of the incident on employees and the local and wider communities.

Of critical importance is the ability to act quickly and to establish a multi-

sector response mechanism which has the necessary powers to mobilise and cascade intelligence across social partners, government, employers, community assets and other stakeholders. Quick mobilisation of resources across organisational and professional boundaries is valued(9) with the common aim to support all those affected and reduce the risk and minimise the long-term impact(43;63).

“Certainly putting measures in place as early as possible is really important.”
Dr Elliott, UK

“Where is the sense on them waiting and being unemployed for 6 months, they lose that habit of getting up and going to work, they lose some of the day to day skills that they have. They get entrenched in the routine of unemployment.”

Preparedness and the ability to mobilise action quickly is one of the key lessons from the response to MG Rover. This meant that access to advice, financial support as well as managing a helpline for those affected, were administrated within hours of the closure(64). The job and skills centre mobilised an extra 160 staff and registered 5,300 ex-workers for financial support over 7 days following closure of MG Rover(65).

Implementation of a Task Force or response group, can maintain a permanent capacity for dealing with MUEs and ensure that future responses are informed from the lessons learned from previous events(65). Open and transparent communication and participation of senior decision-makers, alongside clear lines of reporting and governance, are

critical factors for success(9). The Task Force approach to MUEs is not new, and is a format used frequently in the UK to respond to the immediate impact of emergency events.

However, there is a need for systematic representation of health and community partners on the strategic response group to ensure the acute and longer term health risks to communities are understood and addressed.

5.3.1 Include public health and wellbeing professionals

Often there is little consideration of the short and long-term impact on health during a response to MUEs, as 'redundancy' is not considered within the context of 'health'.

"Even we as a local practitioners... in the local health centre we were totally unprepared for this wave of people seeking our advice with various complaints like headaches, stress, anxieties... it was a little more of everything, from the people living in these local communities and people wondering what was happening, because at the time, it was not supposed to be a health-related issue."

Prof. Westin, Norway

Inclusion of health and public sector organisations in the strategic response group, or Task Force, is essential (Box 3).

Box 3: Early inclusion of Health and the Community in the strategic response

A Task Force is an independent body established and chaired by government, with relevant stakeholder groups represented, in response to an event of national importance that needs to be investigated and recommendations put in place, or a process overseen.

Early inclusion of health, community and voluntary sectors is beneficial.

Inclusion of health and public sector organisations, including public health will;

- Ensure communication across partners on the short and long-term risks of MUEs to health (both physical and mental).
- Ensure communication about the impact on the health of individuals, families and communities directly and indirectly affected.

- Help inform implementation of preventative measures early in at risk localities.
- Advise, prepare and mobilise health and social systems to respond.

Inclusion of the community will;

- Help identify key issues which are often unique to each community.
- Draw on their own strengths and assets to shape collective responses.
- Quickly mobilise local support and local resources, to support those affected.

Inclusion of the voluntary sector will;

- Help mobilise health and social support for individuals, families and communities affected.
- Provide valuable knowledge about local needs, community assets.

“Public health and the perspective we bring, particularly in that sort of... thinking about social and environmental determinants ... we do take a big picture view. And sometimes because of the connections that we have, we can see the linkages that others don't. And can help pull it together. And effectively, there's nothing magic about it.”

Dr Brunton, New Zealand

“Working being a social determinant of health- it's a no brainer, it's a role of public health to be involved. Health should be there in place from the start, and help to put the messages across in terms of managing the situation, around managing uncertainty.” *Ms Lake, UK*

5.3.2 Include the community

Ensuring active involvement of existing social support networks and community leadership in the response are essential(66) (Box 3). In the New Zealand Huntley Mines informal support provided by local business, agencies, council and community groups was considered more successful than governmental organisation support which focused largely on re-training at the expense of social connectedness(56).

Communities are assets, and capable of mobilising plans quickly from development of a community hub providing advice on how to access support available (e.g. community regeneration grants), to organising collective responses to share resources, such as advocating for extensions to car loans support following MG Rover redundancies enabled



ex-workers to remain mobile and travel for employment(65) (Section 5.5).

Examples of community driven hubs are common and valued as opportunities to socialise with other former employees, and maintain social connections(56). For example, in New Zealand, in case of the closure of the Tomoana Freezing Works (1994), community leaders mobilised resources quickly, and within five days of plant closure set up a resource centre for the community initially supported by volunteers but going on to secure government financial support(56).

Another example from New Zealand is the Tuatapere community, where its citizens set up a group to focus on promoting the natural assets of their location, largely tourism, and supported the development of many walking tracks in order to promote activities for community and also attract visitors into their locality(56).

Within the community, the voluntary sector also has an important role to play in providing health and social support to individuals, families and communities going through the stress of MUEs. As an existing provider of services and of knowledge about local needs, the voluntary and community sector have an important role in the response to MUEs (Box 3).

5.4 Early implementation of tripartite support (re-employment, financial, health & wellbeing) for redundant workers

Two key components of the initial response post MUEs are to support workers to find re-employment and the provision of financial advice and support. Employment and financial security are important factors for health and wellbeing, but there is also a need to proactively address the health and wellbeing consequences of MUEs - the third element in a tripartite response to MUEs. Delivery of support for redundant workers should be implemented as early as possible to address concerns in the anticipation of a MUE. The location of support also needs due consideration to ensure it is accessible to those at risk of redundancy.

Early engagement

A critical step is early engagement with the employer (in particular the Human Resources department, or equivalent) to **identify those at risk of redundancy to facilitate delivery and raise awareness of support available.**

“We needed the names of the employees and their address and contact information so they could have direct contact because after the bankruptcy, suddenly everyone’s gone. It’s just closed doors and HR people, administrators, everybody’s gone.”

Prof. Bergström, Sweden

“The Information Sharing protocol should be agreed at the outset, at a high level.” *Ms Lake, UK*

Early provision of support during the period of uncertainty that precedes the MUE is essential to support the workforce (Section 4.3); especially where workers may lack a sense of urgency

about the need to find re-employment in industries which have provided employment in the areas for generations.

“I think people had seen that the writing was on the wall for many years, but at the same time I think people were still holding out hope that although there’s been lots of talk of closures over the years the government would continue to put money into these industries and continue to keep them afloat for another couple of years.”

Mr Rideout, Canada

“We know from experience that those who leave early tend to fare best, and those that are there to the end can struggle, I think they find it more difficult.” *Prof. Spoehr, South Australia*

A proactive approach to managing redundancy is found in Sweden, where employers are required to give employees up to 8 months notice of a dismissal period, during which time the **Job Security Councils** proactively supports people to find re-employment(67). Job security councils were first created in the 1970s in employment legislation, and are in addition to standard public employment services, to support redundant workers back into work. Re-employment rates within one year of displacement are more than 80% in Sweden and Finland, compared to 30% in France and Portugal(68).

“We come back to the issues whether we should look upon this crisis or whether it’s something that is continuously going on in our economy. So I assume that... redundancy is something that we have to live with. We don’t like it, but we know we cannot avoid it, so we need to have a system that takes care of it whenever it happens.”

Prof. Bergström, Sweden

Accessible support

Support needs to be delivered through collaborative links with community groups, unions and employers and accompanied by a formalised communication strategy to raise awareness about what is available and for whom(11;55;69).

For example, following the closure of Mitsubishi, Australia around 60% of workers affected by MUE who were surveyed (n=373) indicated they had plans for further training to assist their future employment, yet many did not use the providers available to find new employment. The lack of a communication strategy coupled with inexperience in the provision of assistance to skilled workers were identified as the two main challenges with the support offered(69).

Offering easily accessible support in a familiar environment, is critical.

“It’s much better that we do that sort of encouragement and support in a group, where everybody’s doing it and everybody’s making the mistakes, ... it’s to make sure people don’t feel that they have to deal with this by themselves.”

Consideration of whether this is best implemented ‘on site’ or in a familiar environment elsewhere is important in situations where there may be divisions between those leaving employment and those remaining employed(4).

Two examples of industries which provided multi-agency support for their workforce facing redundancy on site included the Nokia Bridge Programme (organised by Nokia Company, Finland)(1) (Box 4) and Holden Transition centre (Australia)(70). Support focused on information, employment seeking advice, up-skilling, and financial advice regarding redundancy payments, retirement and benefits advice. Implementation of a ‘one-stop shop’ approach co-ordinating support for workers across employment, financial support and health and wellbeing, such as the Voimala centre following Nokia redundancies in Finland is likely to be beneficial(71).

5.4.1 Skills and re-employment support

Re-employment support is most likely to be effective when redundant workers have access to early career counselling and skills training tailored to their needs, relevant to local labour market, and delivered through high quality providers working in partnership with local agencies(65;72). Those that find re-employment more quickly tend to have higher overall job quality, lower anxiety, and higher life satisfaction(55).

“Often these workers, because they’ve been in the industry all their lives, they’ve never had to apply for another job, so they’d have got that training and help them to apply for the jobs, what to do, how to dress for an interview, how to conduct yourself in the interview, put a CV together, all those sort of employability skills.”

Dr Stroud, UK

Box 4: Nokia Bridge Programme (2011-2012) (1)(4)

Industry lead support programme implemented across sites in eight different countries.

The package included redundancy pay, defined grace period and local re-employment support.

Five 'Bridge Paths' implemented spanning

- Re-employment within Nokia.
- Find a job outside Nokia.
- Start your own business.
- Learn something new.
- Create your own path.

An evaluation of the programme found;

- 80% of respondents felt the programme helped them learn how to find a new job.

- 60% valued the support to their self-esteem as job applicants.
- 65% felt that interactions with other Bridge participants supported their mental wellbeing.
- 56% better able to cope with the transition.

The most common reasons for not using the service were

- Positive (found alternative employment or had clear plans, 35.1%).
- Psychological (11.8%).
- Lack of awareness (11.8%).
- Mismatch with needs (9.4%).
- Accessibility (9.4%).

Formal support tends to provide job coaching and counselling, careers and job application support, training needs assessments, and vocational training. **Supporting individuals to gain formal qualifications for the skills and knowledge they have acquired over the period of employment is also considered beneficial.**

"Particularly in the manufacturing industry, a lot of skills and knowledge are gained on the job, but they're not necessarily codified or people don't have qualifications, ...so one of the best things we can do is to ensure that prior learning is recognised and ... a formal qualification is provided ... in an effort to try and improve the abilities of those workers to be able to gain other forms of employment."

Prof. Spoehr, South Australia

Some responses include the provision of information on starting a business, but these tend to have a very low survival rate, with most closing within 4 years(73).

"Only about 10% thought about establishing their own business and to be honest, those who thought about establishing their own business didn't do too well unless they were skilled labour working, say electrical trades or similar." *Prof. Beer, Australia*

There are also examples of job fairs, bringing together employees at risk of redundancy with employers in the local area. Interviewees reflected that attendance at these events was usually low and had limited effectiveness.

“There was a job fair, and I think surprisingly most of the workers found the job through personal networks rather than the job fair.”

The extent and impact of the formal support varies in each case, depended on mobilising and linking existing and new resources. Examples include the UK Rapid Response Service such as Positive Action on Continued Employment (PACE)(74) in Scotland, ReAct in Wales(10), the Skills and Training Initiative in Australia(11) and some implemented by industry such as the Nokia Bridge Programme (Box 4).

“It’s about helping the individual leave the past, identify the current situation, the opportunities which are there... have better self-knowledge about what do I actually know about, what can I do, what do I want to do, and very practical things for example, to write an application, a CV, job interview ... or searched for a job ... support the identity and self confidence in the individual. And also, dealing with the mourning of leaving the previous job and your old friends. So it’s all these kind of individual issues that happens in the time of restructuring.”

Prof. Bergström, Sweden

For re-employment support to be effective, it must be market driven (reflecting the local labour market or projections) and needs based (addressing the training needs of those at risk of redundancy)(65). However the volatility of the labour market can be challenging, for example in one area, redundant workers were encouraged to retrain in skill sets to meet the

needs of an expected new specialist employer to the area. However the new investment did not go ahead, leaving workers trained for roles that were no longer needed.

Following the Taskforce response to the closure of MG Rover in England in 2005, three years later approximately 90% of the workers had found jobs. A review of the support programme found that 60% completed education or retraining, and 56% visited jobs fairs but the job fair was not considered useful. The majority of workers (70%) reflected that they found another job through their own initiative and personal contacts rather than formal routes. Many found free travel (80% of respondents) and training (65% of respondents) useful, but uptake was low (10% and 37% respectively)(55).

Whereas, in Mitsubishi, Australia, lack of re-training opportunities and skills shortage resulted in many redundant workers finding employment in lower paid positions, with less security; 70% earning less than before, 30% choosing to retire and 20% moving from full to part-time employment(75). Interviewees reflected on a rule of thirds.

“Where around about a third of the workers transitioned into reasonably secure employment and a third into less secure and a third really struggled, and were unemployed or under-employed.”

Prof. Spoehr, South Australia

Supporting individuals to find suitable re-employment can prevent higher numbers entering early retirement or part-time employment in poor quality work, and losses to the labour market in the longer term. The importance of securing good quality employment is that it can reduce the long-term health, social and economic consequences for workers, their households and the wider community(75).

Longevity of support

The reactive response needs to be delivered with due consideration of the workers readiness to actively respond to the shock of redundancy, and to sensitively support those who may never have been unemployed before to make informed decisions(11;65).

“Loads of people pile in and they all offer their help, and then they leave again, and then six months later you’re all sitting here going, alright we actually need a little bit of help now, but nobody’s here because everybody does the immediate thing and then they leave. So five or six years later we’re still sitting and we need to stop saying that we’re resilient.”

Ms Harvey, New Zealand

Encouraging those redundant to engage early with the support available will enable quicker re-employment; but there also needs to be a recognition that, for some, longer term provision of support is necessary months or years later(55;73;74;76). For example, those that remained unemployed three years after the closure of MG Rover commonly did not choose to undergo any of the offered training at the time of redundancy and this group was also more likely to report higher level of anxiety and lower life satisfaction(55).

Change of focus from re-employment in ‘any job’ to ‘a good job’

Often re-employment is likely to be into more casual or part-time work with less stability(41;55) and may lead to workers becoming ‘trapped’ in a precarious cycle of intermittent work and unemployment (employment instability)(77), contributing to

financial stress(49), with an adverse impact on wellbeing and health.

“We knew the workers understood they weren’t going to earn as much and we found, and they found, that those of them who gained work, were on short term contracts or casual employment when previously they had full time work.” *Ms Kelly, South Australia*

“What also jumped out to me is that stuff around job insecurity and all the zero hours and that is just as damaging as unemployment.”

Ms Harvey, New Zealand

Following the Mitsubishi closure the proportion of workers employed in casual jobs increased(69), and after one year many had multiple jobs (39% had two jobs, 20% three jobs and 14% more than three jobs since leaving Mitsubishi)(75). Following MG Rover’s collapse nearly 40% of the workers who were re-employed one year later saw their new jobs as a ‘stop-gap’ until a better job came along”(43). In addition, the fragility of the labour market may mean redundancy from the new employer(17).



Income security is an important consideration for workers who earned significantly less than in their previous job(43;44;78), with two-thirds of workers reporting being financially worse off after three years of being made redundant from MG Rover, and a quarter of them were in debt(55).

Support needs to be focused on helping individuals find comparable roles or positions, for example, provision of more technical training can provide larger wage increases than non-technical training(74).

Emphasis on supporting individuals to gain re-employment in a ‘good job’ (Box 5) rather than ‘any job’ will be beneficial to longer term health and wellbeing(3).

5.4.2 Financial support and employer incentives

The financial strain of redundancy can both act to increase the motivation to search for alternative employment, and also increase stress and depression with adverse consequences on re-employment(76). The provision of financial support to individuals made redundant will vary depending on the social system in the country and wider economy and can include redundancy payments, social benefits (e.g. financial support

Box 5: Characteristics which determine the quality of employment(3)

- Job security
- Pay and hours (including shift patterns, rota work)
- Physical work environment
- Balance between demand and control, effort and reward
- Balance of power between workers and employers
- Good quality employment is better for health

for seeking employment, housing support), and access to funds for travel, training or to start a new business(17). **There is a need to provide financial advice and increase awareness amongst individuals affected on how to access the support available to them.**

“There was quite a lot of softer kind of economic advice that could have been provided, never mind signposting to social support networks. There was stuff around ... do I invest the lump sum ... there were people who couldn’t claim benefits at all because their wives were in employment and this kind of thing.”

Dr A. Plows, UK

Although the provision of social financial security is supportive, there needs to be greater emphasis on supporting individuals to find secure, good quality employment, to reduce the risk of individuals leaving the labour market in the long-term becoming the **‘hidden unemployed’** (Section 4.2).

“It’s like a lobster pot, in which you can fall into, it’s very hard to get out of, because once people are out of the labour market on incapacity benefits, even if their health doesn’t deteriorate and that’s something you know more about in terms of interaction between long-term unemployment or economic inactivity and ill-health. But even if their health doesn’t deteriorate, increasingly, they begin to see themselves and define their position as being a sick person rather than somebody who might work if there were jobs available to them. And because they’re not required to look for work when they’re on ESA [financial support], mostly they don’t.”

Prof. Fothergill, UK

Redundancy payments – delaying engagement

Redundancy payments can provide welcome financial security at times of uncertainty, but for some the period of financial security may be short lived and can act as a disincentive to search for new employment(17). These examples highlight **the need to provide accessible financial advice and increase the longevity of support.**

“The other thing is there may be a delayed reaction anyway because what we’ve found from previous experience and I know my experience in industry is that people often get a big lump sum and its like, “Oh this is fantastic we don’t have to worry.” Of course that money very quickly disappears unless it’s prudently managed. So ...the real impact of unemployment is in fact what it is, often it doesn’t hit people until sometime later.”

Prof. Davies, UK

“For a moment they could have a quite good redundancy package or workers compensation in the unemployment benefit. So perhaps they weren’t as active that they should have been or could have been in the beginning.” *Prof. Ylikännö, Finland*



Eligibility criteria for redundancy payments can also prove a barrier to individuals being proactive in searching for new employment. For example, in Australia workers were only eligible for redundancy payments if they stayed until the employer closed, so workers were not able to engage early with the labour market and find suitable alternative employment.

“[they] would be offered a job somewhere else but they would choose not to take it because they knew that if they took it, they wouldn’t get access to the redundancy payments.”

Prof. Beer, Australia

Financial incentives for employers

Financial incentives may be directed to local employers following a MUE to encourage investment and diversification to create good quality and sustainable jobs, or subsidies to employ recently redundant workers(55). However, a number of interviewees reflected on the limitations of these incentives; that they did not generate sustainable employment, or they incentivised employment of those who met the criteria for the award, rather than hiring an individual with the more appropriate existing skill set(55).

5.4.3 Health and psychosocial support

Many interviewees reflected that despite the detrimental impact of MUEs on health and wellbeing often this element was missing from the organised response.

“It struck me very forcefully that nobody was addressing the longer term impacts in terms of whether that be physical health or indeed mental health.” *Prof. Davies, UK*

“It is not about re-employment, but there are also many implications for health and social as well.”
Prof. Ylikännö, Finland

Inclusion of health

Early consideration of and raising awareness about the risk of MUEs to health (Section 4), alongside mobilising resources and bringing together partners to deliver a joined up approach to address the potential health risks is necessary (Box 6). Where health has been included in the response this has ranged from provision of existing services led by community specialists (e.g. general practitioners), or development of a public health led strategic response.

“We did it as our local GP, assist people the way we could.”
Prof. Westin, Norway

Box 6: Examples of a public health informed approach to mass unemployment from those interviewed

Canterbury West Coast, New Zealand

The Public Health Unit was involved in the response outlining the impact of redundancy on health, facilitating an inter-agency model of working, not necessarily leading but connecting local communities and local organisations together into a strategic response.

As a result the response included:

- a) the evidence of the impact of redundancy on health.
- b) the need for health services to respond to potential rising demand.
- c) cross-organisational working bringing together council, primary health organisations, public health, mental health service.
- d) working with local communities, to identify needs and support the community response.

Port Talbot, Wales

A dedicated health taskforce was convened, chaired by the local Health Board, and brought together stakeholders to focus on addressing the health and wellbeing impact for those directly and indirectly affected by redundancies in the surrounding area.

As a result the response included:

- a) the evidence of the impact of redundancy on health.
- b) consideration of mental health and counselling needs, and health services to respond to potential rising demand.
- c) cross-organisational working bringing together council, primary health organisations, public health, mental health services, Unions and debt management services.
- d) working with local communities, to identify needs and support the community response.

In Finland, where employees had access to a company health care scheme through a health insurance model, redundancy resulted in loss of access to health care. To relieve the pressure on the local health services, funding was secured from the European Social Fund (ESF) for one or two nurses, offering physical wellness related programmes, walks/group based outdoor activities specifically for those affected by the Nokia redundancies. The health service was provided in the same location as the re-employment support and with an informal space to meet and talk to others.

“To release the pressure for the normal health care services, we offered a nurse which was specifically available for the unemployed from the Nokia site.”

Resilience and psychosocial support

Informal support through personal relationships is valued in those who experience mass redundancy, with 75%

of ex-workers at MG Rover reporting feeling supported by family, friends and existing support networks. However, insufficiencies in the formal support system were reported with few feeling supported by government(6%) or their local community (10%)(55). Following the SSI RedCar redundancies, 60% wanted more psychosocial support, relying on family, friend and ex-workers(79). Many of those interviewed also highlighted the crucial importance of informal support.

“Trade union-based, that was still just hanging on, but were really important in terms of men giving each other appropriate and non-stigmatising support.” *Dr Elliott, UK*

“The church was quite involved to offer mental help or maybe too strong a word, maybe it was more like someone to talk to. So there was a possibility to talk to somebody.”

Resilience is the ability to adapt to change associated with adversity. Some people are more able to embrace change, whereas others are carried along by the event in a more fatalistic manner(78). Only a minority of workers report new opportunities following being made redundant(53), including the opportunity to retrain and change career(44). This is predominantly among those under the age of 50 years, either as ‘active career changers’ who started the process before the MUE, or as ‘triggered career changers’(78).

With the culture of work shifting towards more precarious employment, there are no longer guaranteed jobs for life(75). Individuals need to be able to flexibly adapt to change(19;43), particularly the older workforce(41;55;80).

“It’s about people being aware that they have to travel more, social change, how do you understand the local labour market, and how it’s changing, that now you don’t have a job for life, you know, it’s coming - I think young people are much more aware of that, so there’s a kind of generational effect as well.”



Following redundancy, psychosocial support needs to address both emotional coping strategies (aimed to reduce negative emotions associated with job loss such as anxiety, stress, and depression), and increase self-efficacy, perceived sense of control and confidence (which could improve wellbeing and re-employment)(81) (Box 7). Supporting individuals in this way may have an indirect effect on re-employment where a sense of control and self efficacy can help improve job search motivation and intensity(76).

One such mechanism of support is cognitive behaviour therapy (CBT), programmes which have demonstrated limited results in the short term, with improvements in job seeking motivation, self-esteem, life satisfaction and success rate for obtaining full time employment(82;83). However, in practice in Australia, provision of CBT within employment support agencies was challenging due to lack of recognition of the benefits, lack of resources and capacity to deliver programmes which were not vocational qualifications(84).

“We come from a traditional place where traditional mining and forestry and hard people doing hard jobs, and when there are none of those jobs left they’re not the best people at coping, or asking for help, or saying what’s going on. So we’ve been doing a lot of work around particularly men asking for help when they need it.”

Ms Harvey, New Zealand

“We’ve been trying to identify those affected to make sure they’re supported if necessary and appropriately. It’s a delicate issue because it’s[the steel industry] a very macho work environment and dealing with issues around vulnerability and mental health, emotional wellbeing is difficult. I know from talking to the unions pre the announcement that they were concerned about stress levels and impact on their members mental wellbeing and so we were already having discussions with the unions particularly about the support we can give.” *Prof. Davies, UK*

Box 7: Example of an in-work psychosocial support programme, South Wales

A support programme implemented by Health Subgroup in response to TATA redundancies was open to all employees living in the local area and focused on:

- Dealing with maladaptive coping strategies such as sleeplessness, anxiety, substance misuse, stress.

- Increasing coping, resilience, positive thinking, sleep hygiene.
- Families of workers were also offered psychosocial support.

Box 8: An example of the South Australian Health and Medical Research Institute (SAHMRI) intervention: Building Resilience and Wellbeing During Downsizing (Kelly, G. Director. Personal Communication. 17th November 2016)

With Australia facing a complete withdrawal of the entire car manufacturing industry by 2017, the Wellbeing and Resilience Centre (SAHMRI) runs resilience training programme for workers in transitions. In 2015, this was implemented in partnership with Futuris Group and Hirotec, to learn to deliver practical resilience skills to their workforce, based on train the trainer model (200 workforces).

The main objectives were to increase wellbeing and resilience of workforce in transition (facing redundancy/downsizing), aiming to increase capacity of re-employment, better physical and mental health, and maintain productivity.

Defined aims of the programme

- Maintain employees' wellbeing and productivity focusing on PERMA (Positive Emotions, Engagement, Relationships, Meaning and Accomplishment).
- Enhance employees' wellbeing, abilities to manage stress and other mental health related barriers to transitioning to other employment, retirement or further education.
- Mitigate likely risk of health issues, absenteeism, injuries and low morale.

Intervention

- Delivered by SAHMRI in partnership with Techworks and Futuris Group.
- Train 10 internal staff (train the trainer model) to deliver the resilience training workshops to all employees.
- Train the trainer model, which allows for the intervention to stay at a low cost, and be easily replicable within the company.

Outcomes

- Trained 10 internal staff to deliver the workshops to all Futuris employees.
- At the time delivered 14 out of 20 employee workshops, with focus on PERMA dimensions.

In the year following the resilience training, the company's early preliminary results showed some positive evidence of:

- increased wellbeing (increase in mean PERMA score, and across all PERMA domains (12%)).
- reduced absenteeism (43% reduction).
- reduction in lost time injuries (0 reported in 7 months).
- medical treatment injuries (56% reduced).
- 21% decrease in physiotherapy consultations for work related injuries.
- reduced performance management issues.
- increase in overall quality production results.

To date, the programme has been also integrated in Australia into large transition programme involving the Automotive Transformation Taskforce and Department of State Development to deliver practically focused workshops in employment transition.

"Our proposition was, what if you could build the growth mind-set, the strengths approach, the perseverance and persistence of this group of people, the emotional self-regulation, before this group of people go into absolute crisis."

Ms Kelly, South Australia

A further challenge is the attitudes to mental health and barriers to seeking support amongst industrial communities. A recent pilot workplace based psychological health training programme has been developed in Australia - delivered by peers within the industry facing closure. There is some early indication of improvements in wellbeing across the workforce, and reductions in absenteeism (Box 8).

It may be beneficial to consider whether a targeted approach should be provided alongside a population or wider community programme to ensure support reaches those involved. Learning from programmes implemented following other emergency events which have an impact across communities, such as the social media psychosocial first aid campaign called “All Right?” implemented in New Zealand following an earthquake disaster to increase emotional awareness and shift attitudes towards help-seeking and mental health(5) (Box 9).

Building the case with stakeholders for the provision of health and psychosocial support is needed to improve understanding of the potential beneficial effects on re-employment and productivity(56;84).

Psychological support should be provided alongside the re-employment support and include (i) facilitation of informal peer support networks (e.g. providing a community space for peer support to continue in the loss of work related networks(85), and (ii) the provision of free, accessible and evidence based psychosocial support tailored to those at risk of redundancy.

Box 9: “All Right?” A population Mental Health Promotion campaign(5)

Address the community wider impact of MUEs on mental wellbeing by implementing a population based programme, learning from those implemented following other emergency events which have a detrimental impact across communities. For example, a population based psychosocial wellbeing campaign implemented in Christchurch, New Zealand following the earthquake disaster in 2010-2011.

Included targeted messages to normalise experiences (recognizing and acknowledging emotional impact of earthquake disaster), and advice based on the ‘Five Ways to Wellbeing’ framework(7). Accompanied by a range of free psychosocial services, support and information with a single point of access.

The campaign reached 70% of the population and 84% felt messages were helpful.

Factors for success included;

- Strong stakeholder engagement building on pre-existing relationships with key agencies.
- Campaign grounded in good health promotion theory-not just marketing.
- The *All Right?* message was empathetic and phrased as a question which began a conversation about wellbeing.
- Social media enabled a conversation with the public in real time.
- Strategic partnership with Non Governmental Organisations, rather than being marked as a government message campaign, encouraged trust.

5.5 Address the needs of specific groups including those older and unskilled

Those of older age, with less transferable skills and less able to travel to employment are less likely to gain secure long-term re-employment(9;43;74), and could benefit from targeted support.

What to do for older workers

Older workers have been shown to have a much lower probability of being re-employed than other retrenched workers(86), and many end up retiring as a result(23). **Following the Mitsubishi closure in Australia, 28% of those who subsequently retired indicated they would rather be working, but had been forced to withdraw from the labour market because they were unable to find new employment(69).**

Older workers face significant challenges in gaining re-employment, especially if they have spent a prolonged period of their employment with the one employer using the same skills, with fewer formal qualifications, and poorer literacy and numeracy skills(72;87) and are less willing to embrace change and re-skill, or travel for work(21;27). Employers may perceive them as having obsolete skills and with high re-training costs(73); and for some, the cultural influences and perceptions of traditional industry jobs play a role in their aptitude to retrain in other sectors.

“Older men will be worried about losing or may have lost their jobs with little prospect of getting anything else.” Dr Elliott, UK

Provision of a tailored offer of support, such as that developed in Australia (Box 10), may help, but needs to also consider the mental wellbeing amongst this group, as older workers have been shown to suffer the most with depression following mass unemployment(72).

What to do for skilled and unskilled workers

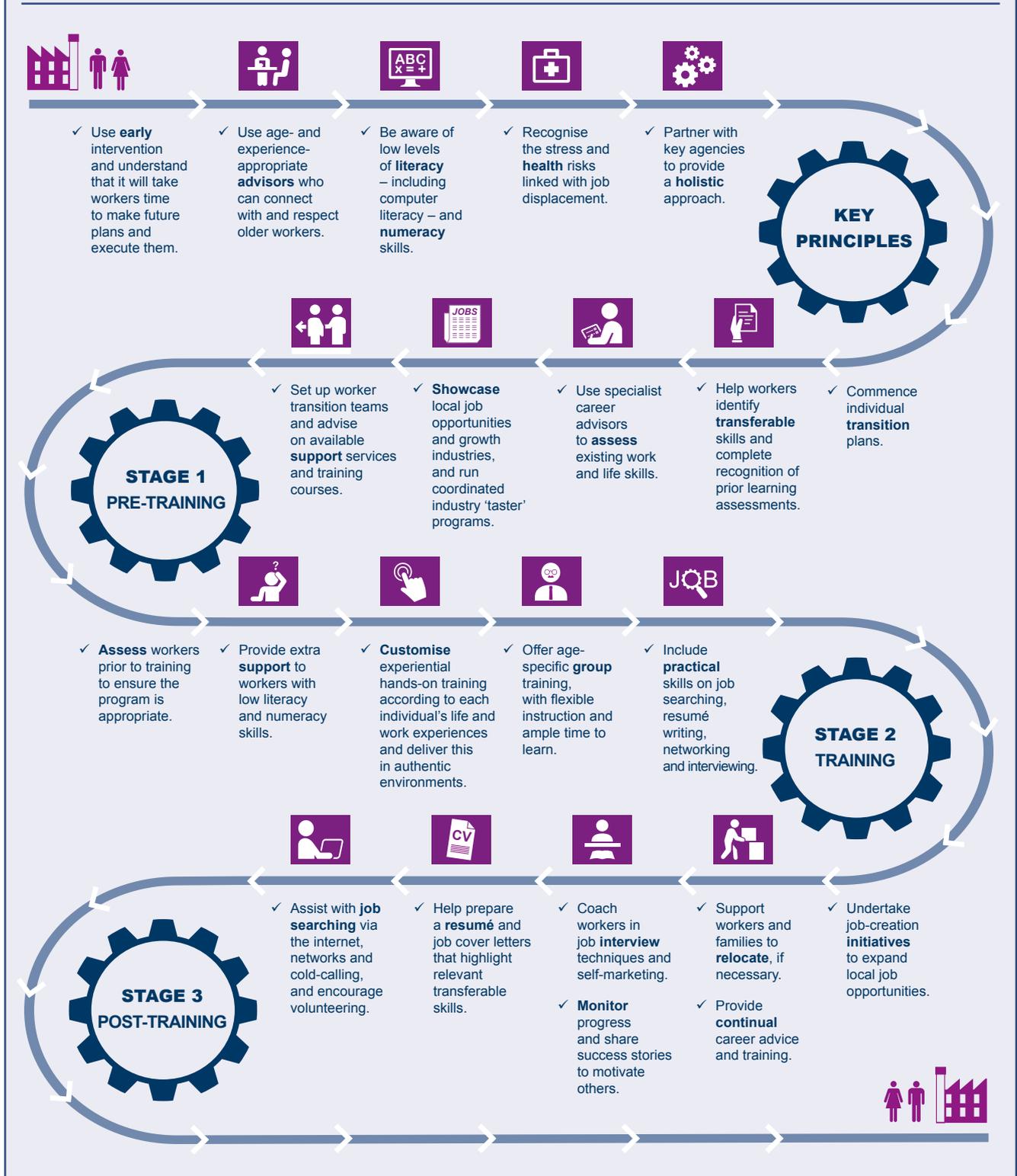
Highly qualified and skilled workers, in particular those with more transferable skills from retail and financial service sectors rather than from specialist, industrial roles are more likely to find re-employment more quickly(9;88), and achieve a comparable income(55). **Skilled workers tend to use formal routes to find jobs, covering greater geographical areas and wider opportunities, whereas those low skilled may be less efficient at finding job opportunities and may also be in a larger pool of unemployed and therefore less likely to find secure employment(73).**

In the case of Mitsubishi, Australia around 37% had not completed high school, and 20% had, at most, a basic trade certificate as their highest level of education(69). With less transferrable skills and greater challenges to find comparable re-employment these individuals may be forced to take up lower paid jobs, increasing the risk of polarisation of the labour market and reinforcing inequalities across communities(19).

Targeted support for workers who are unskilled, or whose skills do not match labour market demand, is needed to help secure good quality re-employment; and therefore prevention of long-term unemployment with negative consequences on health and wellbeing.

Box 10: Helping older displaced workers find a new job

Reproduced with permission from the National Centre for Vocational Education Research (NCVER)(80).



What to do for employees remaining in the organisation

Employees who remain in the organisation, for example as a result of downsizing, may also be affected by the stressful situation with expressions of anger especially if the redundancies are seen to be unfair or unjust, concern about pay, anticipated increases in workload with fewer people, and concerns over longer term job security(89). However, when remaining employees believe they can cope with the situation effectively, they are more likely to respond in a more constructive way(90). **Workplaces need to consider how best to support those who remain, including job counselling and training programmes and opportunities as the workforce is reduced(91).**

Understanding the importance of community ties

Factors affecting an individual's ability or willingness to travel for employment include individual characteristics (age, sex, skills), and the geographical factors (transport infrastructure and strength of community belonging). At an individual level, skilled employees who are also more able or willing to be flexible in the geographical area of their job search are more likely to be able to find alternative sources of employment(9), more quickly and in better roles(55).

An innovative approach in Norway to address the loss of the workforce community is the development of **community hubs** for 'distance workers' to support individuals who commute outside the local area to access regional job markets.

"If you don't really have colleagues, you will then have a community [in the hub] where you can have your coffee break."

Some individuals may decline opportunities further afield for financial, family or social reasons. **Provision of financial support to address barriers including housing tenure, price differentials and travel costs(19;69;73) may help in the short term but have been found to be unsustainable(48;87), and in some instances uptake was low(43).** Commuting can be particularly difficult for female workers with familial responsibilities, who are less able to be flexible(39) and are more likely to withdraw from the workforce or find part time work(39;88). In one Sardine factory in Norway that closed, workers had predominantly been women. In this case new employment further from home was not possible because of their dual roles as providers of child and elderly care, meaning they were less likely to re-enter the labour market following redundancy(39).

A strong sense of place and community can lead to resistance to change(27;52;54), in particular in areas where the sense of belonging means individuals do not want to leave their local community for employment.

"Being able to commute was quite an important determinant whether you had access to a massive job market. The fact that you needed to go beyond your local constituency was not something that people would consider."

"So it seems to me as much about those communities and the allegiance to them, the family, the generations that are there. People want to stay in those places, or some do at least."

Dr Stroud, UK

The result can be increasing inequalities in outcomes for individuals in a local community where those with higher education and skills, and the financial means to commute or move away for new employment do so, and those who remain may struggle to find re-employment in an area affected by MUEs.

5.6 Extend support to family members

The MUE will impact the health and wellbeing of families of workers and wider communities(19;21;27;41;92). Following redundancy the impact on the family includes financial pressures, increased stress and anxiety, pressure on family relationships following the need to commute long distances to take up positions further afield, all of which contribute to the breakdown of family units(43;73) (Section 4).

“People will be extremely anxious and all those impacts on family life and so on will be there.” *Dr Elliott, UK*

“What I did find was that it was the women who were not supported. Nobody thought to support the women and the women were having a very hard time.”

Prof. Walkerdine, UK

The formal response tends to focus on the individual but several participants provided examples which had also sought to support family members for example, to secure employment, financial advice and addressing mental wellbeing of family members (Box 11).

In the case of MG Rover, partners and spouses of workers were offered an analysis of skills and training needs(65), but few took up the offer due to a lack of awareness(43). In Japan following the closure of coal mines, support included housing and schools for the children of redundant workers, addressing concerns regarding elderly parents, and employment opportunities for the wives of workers after migration(87); and after the closure of Mitsubishi many workers sought housing support(23).

Families are also recognised as a valuable asset, with redundant workers reflecting

they receive significant support from their family networks. Following MG Rover, family and ex-employees played a crucial role in providing support during the three to eight months straight after the closure(55;93). Following other MUEs, families of redundant workers created their own community support groups.

"She created the Rover Community Action Trust...to help with the local family and the children and everything."

"The families themselves who were affected, effectively developed their own support group which exists to this day around there."

Dr Brunton, New Zealand

Box 11: Components of support for family members

Family provides vital support for workers undergoing MUE, but they are also affected by the shock, and the stress of the event is likely to impact on family dynamics. There is a need to widen support to spouses and children of workers.

- Extend financial and re-employment support to family members.

"...the level of support remained financially the same but for the family of those unemployed, they could access it and they didn't have to be the person made redundant, so that it doubled the chances for somebody in that family becoming employed..."

- Provide health and wellbeing support addressing the risks for families, including children, as a consequence of MUEs (see Section 4).

"...we know from our own evidence but also from the research that it affects families, it affects mental health issues around substance misuse, domestic violence. We've been trying to identify those affected to make sure they're supported if necessary and appropriately." Prof. Davies, UK

"...it's impacting on children starting school and feeling stress because of stress in the family. So in response to that we have...been teaching some mindfulness in schools."

Ms Harvey, New Zealand

- Raise awareness of the support available for family members.

5.7 Support the wider community and harness assets

A MUE can have a devastating effect on a local community both on those employed elsewhere in the supply chain, the current unemployed and the potential loss of community identity and social networks where the employer and the daily lives of the workers and their families are intertwined.

5.7.1 The existing employed in the supply chain

The impact of industry closure on small businesses in the local area is often unknown but could be significant(21;63;94-96). To illustrate, although 6,300 workers were made redundant at MG Rover it was estimated that there were several thousand equally as affected in the supply chain(55). **Therefore early identification of major supply chains is key to both explore potential diversification (to protect against the impact on the supply chain workforce) and to support employees concerns once the MUE is announced.**

“Usually when we think of a redundancy or a plant closure it might just affect the workers, it doesn’t, it can affect the community, it can affect those people who supply parts to that company.” *Prof. Blackaby, UK*

5.7.2 The current long-term unemployed

Following MUEs there is a risk of marginalisation of the current unemployed due to increased competition in the labour market. The unemployment is passed down the line to those with lower skills and employability who are the most disadvantaged (Section 5.3.1).

“It’s easy to forget that those people who are already unemployed, they get a worse situation ...their unemployment spell has become longer.” *Prof. Bergström, Sweden*

“The sort of filtering process that happens so that let’s just say a fit and able worker comes out of [industry] and they take a job maybe in a factory somewhere in the local area; that might have gone to somebody who was a bit older and not as healthy. This is how you get the marginalisation of people with health problems or people with low skills or indeed at advancing age in the labour market. It’s that normal competition that happens in the labour market, marginalises people who are less attractive to employers.”

Prof. Fotghergill, UK



5.7.3 Harnessing the community identity

In many industrialised areas a large industrial employer can be part of the fabric of the community, providing secure, well paid, skilled employment for generations alongside the social networks.

“Many of them come from families where their dads and some of their granddads were miners, as well in those communities, so this is what they know...trying to do something else, it was actually really, really difficult.”

Dr Brunton, New Zealand

“It’s very institutionalised so these guys, a lot of them are working for 30 to 40 years in the same institution... coaches would come and pick them up at the end of the shift and they might have a drink together and that kind of thing. All that went.”

Dr Plows, UK



In New Zealand, recognising the loss and supporting communities to build on the historical context and cultural identity was helpful to adjust to the changes.

“This is our history, but ... what does the future look like? What does the future of West Coast look like? Because there is no future in mining. The world has moved on and, there’s been some economic development but you need to be looking at technology because you can do that from anywhere in the world, so the fact that we live in a really remote part of the country, and the world, doesn’t matter, because you can sit at your computer and do gaming or whatever.”

Ms Harvey, New Zealand

Other examples of community led initiatives to address community identity include The Huntley Spring Festival(38), which was an initiative to raise the spirits of the mining community affected by recent closure and job losses; and the #SaloStrikesBack social media campaign in Finland (Box 12).

Box 12: #SaloStrikesBack

A social media campaign driven by the community in Salo, Finland, to share and highlight all the positive things and activities, however small, across the city. Implemented as a counter action to the negative media portrayal of the area following Nokia Phone redundancies, an important large employer in the area.

5.7.4 Harnessing the community assets

A key asset of communities facing MUEs is their ability to mobilise quickly to provide support where needed. For example, following the closure of MG Rover, women particularly took initiatives and established community based initiatives and creating opportunities for getting people together⁽⁴¹⁾ (Box 13). Similar initiatives were observed in Ebbw Vale, where women provided bespoke support for their partners^(21;27) and community.

Simply providing a safe space to enable the community to come together, and build a response which draws on local assets and addresses locally important needs. Ensuring communities can also input into the formalised response is also key (Section 5.3).

“Recognising community strengths and helping to support and facilitate those strengths to move towards a model of enhancing community response should be included in the response. In one example supporting a community led initiative to help the community identify what they needed and how to deliver it was effective. It could be as simple as ‘providing a place or a venue for meeting to happen’.” *Dr Brunton, New Zealand*

Box 13: Components of support for the wider community following MUEs

MUEs can have knock-on effects on communities that can last for generations. There is a need to mitigate the spill-over effects on the wider community.

- Provide health and wellbeing support to communities undergoing MUEs, and prepare health systems to recognise and cope with increased demand on services that result (see Section 4).
- Recognise the potential loss of community identity, and support communities to build on local strengths and networks; and replace lost space for peer support and strengthen community cohesion.
- Strengthen support for the supply chain and long term/hidden unemployed in the community to prevent marginalisation in the labour market.

Preventing the effects of MUEs requires identifying the communities most at risk of MUEs, and supporting those communities to become less reliant on low-skilled employment from a single, large employer and to create a more resilient and flexible workforce and enhance local assets.

- Build skills capacity, invest in education, capitalise on local resources.
- Encourage investment and diversification to create sustainable, good quality jobs.
- Recognise and harness community assets to support others and build community resilience to cope with shocks and adapt to change, as a preventative approach before the event occurs.

“They got to meet others and that sense that they felt that it had enhanced community cohesion... making them feel a part of a community that’s still got some life in it and gives them life in a context in which there’s a sense of everything falling apart.”

Prof. Walkerdine, UK

“If there are no jobs there are no jobs. But we could still be doing some other stuff that will make people connected and feel more resilient and lessen the blow, so some of the work we’ve done... unfortunately post-suicides, is around what did the community need and they decided they needed a resource, so we helped make a resource, and then they actually went and delivered it, knocked on everybody’s door and face to face delivered this leaflet, and it’s all about if you want some help, some people are down the road just now if you want to talk to them. So a really beautiful community response.”

Ms Harvey, New Zealand

whereas the other area (Newport) was better placed to recover economically(97). **Supporting communities to be able to cope with shocks and adapt to change is needed before the event occurs, rather than through a reactive approach** (Box 13).

“Building on the community strengths, supporting those, looking how best you can use limited resources, and being willing to try some things that might be different. If you have communities who have already got some strengths like that, they will respond better to shocks, rather than having to go in after the shock and help to sort of build it up again. It is about doing things that enhance community resilience, even when the pressure’s off.”

Dr Brunton, New Zealand

“Let’s deliberately try to build the psychological help assets of this community of people, well before they lose their job and well before they are told, here is a voucher for vocational training.” *Ms Kelly, South Australia*

5.7.5 Building community resilience

Communities can have different capacities to absorb economic shocks and this tends to be place and context specific. For example, the closure of Corus across two sites in Wales had different levels of impact - in one area (Blaenau Gwent) where historical issues contributed to the uncertainty about the future and impacts, redundancy was much more harmful to the economy, increasing deprivation, higher rates of unemployment and economic inactivity,

There is also an air of caution as resilience is not in individuals or communities alone, but reflects the social networks and webs of support both at a local level and with professional roles. After repeated blows, resilience will be affected.

“It’s that kind of attitude of, you know, we’re tough and we get on with life and it’s all good, but, and we call that, they call that resilience, but after a while you go, yeah, we’re not being resilient now, we’re actually falling apart a little bit”

Ms Harvey, New Zealand

“It’s difficult to know really because of the way the data is collected. It’s very difficult to actually measure any direct action at this stage.”

Prof. Davies, UK

A useful framework to help consider mental wellbeing in more detail is the *Mental Wellbeing Checklist*(98) which considers three key questions;

- (1) Are specific protective factors being addressed appropriately – at the individual and community level?
- (2) Are the wider structural determinants being considered?
- (3) Has attention been paid to particular groups – is it equitable for all people?

Such a framework could be applied in the context of MUEs.

5.8 Evaluate the impact of the response

Examining the impact of the response will help to understand how far original issues have been addressed, as well as inform actions on responses to MUE in the future. During an incident often there is little time to plan rigorous academic evaluation that considers not only impact on beneficiary groups but also non-beneficiary groups, with a control or comparison group. However, approaches can be taken to assess the impact of an intervention, as long as careful implementation and interpretation is undertaken(78).

With increasing recognition of the need to consider quality and sustainability of re-employment, and longer term health outcomes for those directly and indirectly affected, longitudinal studies are needed. Wider economic and place factors also need to be taken into consideration. Building on existing indicator frameworks(9) key questions should include;

- Were the populations affected identified?
- How well did the support programmes achieve its specified aims and objectives for employees, for families, for supply chain partners?
- To what extent did the programme consider the direct and indirect consequences of mass unemployment?
- How successful was the programme in terms of the quality of re-employment, and addressing health and wellbeing?
- Who accessed the support and was the uptake equitable across all groups?
- Were the benefits sustained (e.g. over 12 months or longer)?

Increasingly there are opportunities to follow up people over the longer term, in collaboration with research groups and academia, to further understand the impact on individuals, families and communities, and to better evidence what works to mitigate against the consequences of MUEs.

6 A long-term preventative approach

We asked our interviewees for their reflections on a longer term view to prevent or mitigate MUEs and their impact. A summary of the overarching themes are provided here, and although these are reflections on a long-term strategic view, they are also important considerations in the preparedness (Sections 5.1-5.2) and response stages (Sections 5.3-5.8) following a MUEs.

“On average, it’ll take a community without any intervention and support, 20 years after a massive, mass closure, to come back to the point that it was at the time of closure.”

Understanding the skills and assets of local communities will help support development and attract business to the area in need of those skills. For example, a longer term programme has been developed by the local city and business development centre, named ‘Invest in Salo’(99), which strives to highlight the assets of the local area in terms of diversity of skilled workers and location to attract new businesses.

6.1 Economic forecasting global and local labour markets

There is value in understanding global market forces and mapping industry future trends via strategic use of economic forecasting both in the preparedness stages of a response to MUEs (Section 5.1) but also to ensure development of sustainable employment for local areas in the longer term.

“The economy is based on a single industry or a single employer, I think obviously that’s very dangerous because it only takes that one failure. It can only take the single failure to completely disrupt a community.”

Mr Rideout, Canada



6.2 Skills development to achieve good quality employment

Communities and individuals that can adapt more flexibly to changes to the local labour market are those more highly skilled, younger, and more able to travel for better quality employment. Therefore building skills capacity and highly educated workforce in a local area, capitalising on local resources (including universities, research and development), is considered an essential foundation for building economic recovery.

“Research and development is also important because again that’s all about innovation and developing your processes and your products and establishing links with your local universities. It all adds to this, to the ingredients really as to why a company is more likely to put its roots down and more likely to stay.” *Mr Slater, UK*

“Jobs follow people, people don’t follow jobs, and it’s like, if you get a good group of people here, the jobs will kind of create themselves as well, and it’s kind of an interesting way to flip that around.”

Ms Harvey, New Zealand

“I think resilient communities are those that are highly-skilled communities. So it comes down to skills. You can make people resilient and bear further and further disasters, but...and tell them that you’ve just got to see yourself through this, but I think what makes communities resilient are skills, in the sense of a labour market where the world is global and increasingly getting global. The only way you can compete is on quality, and it’s very difficult for those communities who don’t have skills to be resilient.” *Prof. Blackaby, UK*

Achieving high quality, sustainable employment, for all poses a real challenge as a focus on skills training needs to consider how to help support those older or unskilled to secure sustainable future employment(19), if it is to **avoid generating widening social inequalities**. Moreover, an over-emphasis on training and development can be of limited value if jobs are simply not there.

“So you can see...there’s a lot of policy emphasis on re-skilling, retraining but what’s the empirical evidence that the appropriate skills are provided and actually results in good quality and employment? We did find that [for] some workers, the opportunities were limited.” *Prof. Blackaby, UK*

Incorporating general life skill management into compulsory education was thought to be an effective way of increasing individuals and community's capacity to adapt to changes more flexibly. This can be both to reduce the harms of MUEs but also to mitigate against the impact or such events.

"If people look at what people need, not just for the job market but for... sometimes for managing their own lives going forward, business and economic skills should be something that is taught in schools from 11 [years]." *Prof. Blackaby, UK*

6.3 Investment in infrastructure

The characteristic of the place, its geographical location, natural capital and connectivity are important factors that can have an impact on attracting new employers and skilled individuals into the area (Section 5.6). Investing in development infrastructure (e.g. roads and rail) was viewed as critical as it enables travel and access job opportunities at neighbouring labour markets, and attracting new business.

Interviewees reflected that infrastructure investment needs to be underpinned by strong **strategic planning process** from all major stakeholders, in order to lay the foundation for an economic recovery. This includes local governments, employers, educational institutions, and research organisations, as well as having a good place-based understanding of where people work, live and travel to work.

"What are you going to do to attract, or is it even a place that can attract, businesses that are going to produce the sorts of employment that people want to do. Is it going to be decent work, and well paid work? So I think you have to look at the place where it's situated and what is necessary to make it that type of place."

Dr Stroud, UK

Supporting small businesses is also important through financial incentives (e.g. reduced business rates within Enterprise Zones) or encouraging local spending through public sector procurement policies, and support to encourage diversification and competitiveness. Incentives to attract new large employers into an area need to be well targeted to attract good quality, sustainable employment and reduce the reliance on low skilled industries to fill the gaps.

"Even before the final closure of the coal and steel industries there's always been that attempt to try to find the next large employer to come in. And I think the community at this point we've become very cynical...we've experienced so many times promises of corporations coming in, going to provide all kinds of work and the government gives them all kinds of money and it either never materialises or they start to develop something and they stop and they leave."

Mr Rideout, Canada

6.4 Employers' responsibility – the need for a policy response?

Many interviewees highlighted the importance of early engagement with employers and open, transparent communication to ensure timely and appropriate response to the MUE (Section 5.2).

In some countries legislation requires companies to be more socially responsible employers regarding management of restructuring. For example in Sweden, workers are protected by a collective agreements system, facilitated through the Job Security Councils to support workers to transition to new jobs as soon as possible, leaving them less likely to be at risk of becoming long-term unemployed(67) .

“The different cultures of the companies certainly impact on their willingness and their level of engagement with the workforce.”

Prof. Spoehr, South Australia



6.5 Building and harnessing resilience in communities

The health and wellbeing of communities, families, and workers are all inter-linked, highlighting the need to build and embed resilience at all population levels. Embedding processes to build the resilience of local communities to stressors, identify resources and assets which can enable communities to adapt in time of adversity, and creating supportive environments for health and wellbeing are good practice in public health disaster preparedness(100-103).

Both building psychological resilience before MUEs and consideration during and after a MUE, can be a useful approach to increase integral strength and capacity to emotionally self-regulate at time of adversity.

“What if you could build the growth mind-set, the strengths approach, the, the perseverance and persistence of this group of people, the emotional self-regulation, before this group of people go into absolute crisis.”

Ms Kelly, South Australia

Communities that have experienced adverse events, and have strong collective identity and good level of social support networks, have good assets to build community resilience(104). Those which best adapt to change are communities with strongly developed engagement including community trust, community leaderships and planning, where decision making is inclusive(105) and community champions lead action(106). Social resilience is also an important component in resilient communities including a sense of community, opportunities and places for community gatherings, levels of social support, and collective efficacy(107) are all important factors to withstand adversity(104).

There are multiple theoretical models to building community resilience(108) and the majority focus on enhancing social connectedness (e.g. social networks) through building partnerships, trust, increasing community engagement and empowerment(104). It is important that initiatives to strengthen resilience include local knowledge and expertise to help facilitate community driven leadership. Enabling the community to have a voice in the process of regeneration, to work together and capitalise on its strengths.

“It’s an approach for when you’re not having a crisis to look at working collaboratively, building on the community strengths, supporting those, looking how best you can use limited resources, and being willing to try some things that might be different. To see a way forward. Because it’s kind of, if you have communities who have already got some strengths like that, they will respond better to shocks, rather than having to go in after the shock and help to sort of build it up again...so it’s actually, it is about doing things that enhance community resilience, even when the pressure’s off.”

Dr Brunton, New Zealand

In New Zealand, there are examples of indirect ways of strengthening community resilience, via investing in creative capital. For example, in the longer term following a MUE, setting up social enterprises and encouraging change in a culturally sensitive manner, through changing local attitudes and perceptions of the situation.

“They had lots of empty shops and they did some work with the community where they said, what kind of shops would you like in the town? And then, someone said an ice cream parlour, so they painted an ice cream parlour on the front of one ... so they just painted the empty shops with all the shops that they actually wanted, but then somebody went, I’m going to open that ice cream parlour, and they actually opened the ice cream parlour, so then they kind of created businesses because... it gives people that opportunity.”

Ms Harvey, New Zealand

The causes and consequences of mass unemployment events are complex, and a longer term preventative approach requires adaptive and reactive employers, individuals and communities who can cope and recover from these economic shocks.



7 Conclusion

Mass unemployment events can have a marked detrimental impact on the health of individual workers, their families and wider communities, the effects of which can be long lasting across generations.

MUEs have the potential to create or exacerbate inequalities in local populations, through both the indirect effect on physical and mental health of individuals, alongside the wider societal changes as a consequence of reductions in the labour market and economic and social stresses on the community.

Given the crucial impact of MUEs on population health, Public Health has a lead role in the prevention and mitigation of the impact of MUEs on the health and social circumstances of individuals, families and communities. Yet, health is rarely a core element of responsive action to address MUEs.

This *Public Health Informed Response to MUEs* outlines the need to first **identify areas at risk** of MUEs and understand the potential impact and plan a response; use data and intelligence to **provide an early warning** of MUEs; build relationships with key partners to **mobilise a multi-sector response**; develop tripartite offer of support **addressing the health and social impact of MUEs** (re-employment, financial and health and wellbeing) delivered across populations affected including individuals, families and communities; develop a **strategic long-term approach** to addressing factors linked to place, including the quality of the labour market, geography and connectivity; and lastly to



evaluate, learn and share to further inform and develop a public health response to MUEs.

Given the clear economic, social and health impact of MUEs, and current global economic and political climates, this response framework is an important tool to inform action to minimising the consequences and harms of MUEs to population health.

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Appendices

Appendix A - Literature search criteria

Literature search was undertaken by Public Health Wales Evidence Service in September 2016. 69 papers were identified through a literature search of indexed databases including: Medline, PsychInfo, HMIC, CINAHL and PHW library catalogue/knowledge base (See Table a1). Key Search terms are included in Table a2 and Table a3. This was supported with additional evidence from grey literature and additional literature forwarded from those interviewed.

Search details

Period covered: 1990 to 2016

Limited to: English language

Search filters applied to: geographical location covering UK and expanding to Europe, Australia & New Zealand, Canada and USA.

Setting was filtered for: communities

Population group of focus: Working age population

Table a1: Key Databases and Sources

Databases/Sources: Core Databases	Topic Specific Databases/Sources
AMED	ASSIA
BMI	Econlit
CINAHL	Emerald Insight
Cochrane Library	Social care online
CRD Databases	Sociological abstracts
EMBASE	Scopus
HMIC	
Library Catalogue and Knowledge Base (Soutron)	
Medline	
NHS Evidence	
NICE	
PsychINFO	
Public Health Wales Document Database	
Pubmed	
Meta Search Engines	Additional Sources
Google/Google Scholar	DWP
	Joseph Rowntree Foundation
	King's Fund
	MIND
	Work Foundation
	Young Foundation

Table a2: Key Search Terms, Free Text

Key Search Terms, Free text
(Automotive or car) (manufactur* or industr*)
Coal min*
Factories (manufacturing or manufacturer\$)
Steelwork*
Steel plant\$
involuntary job loss*
closure\$ adj3(plant\$ or factory or factories or mine\$ or industr*)
job displacement
Mass adj2 (unemployment or redundan* or closure\$)
large scale (unemployment or redundanc*) (lay off\$)
Redundan*
Retrenched worker\$
Communit*
Community resilience
Community support
Individual support
(approach* or response\$)
(mitigation or mitigating)
(recovery or sustainability)
Regeneration
Health impact

Table a3: Example of Database Subject Headings

Database Subject Headings: MESH
Economic Recession
Personnel Downsizing
Unemployment
Coal mining
Industry
Steel
Depression
Health status
Public health/ec, sn, td
Stress, Psychological
Quality of Life
Residence characteristics

Grey literature

Grey literature identified additional 104 documents. This included searching for national and international research reports reflecting on public health, government and policy responses to specific steel works/factory closures and management and interventions following this. This included programme evaluation studies, legislation, task force responses, and practical guidelines, fact sheets and policy documents, thesis/dissertations.

Appendix B – List of case studies included in the report

The case studies were based on information gathered from academic papers, research briefings, governmental reports, public health reports, media reports information and reflections from those interviewed and internal reports commissioned by universities. The full case studies repository is available at www.publichealthresearchwales.co.uk/mue-mass-unemployment-events-report.

International

Andersen Ireland (Ireland)
Mitsubishi Motors (Australia)
Nokia Plc. (Finland)
Norbest Canning Company Ltd (NC) (Norway)
Saab Automobile AB (Sweden)

UK

MG Rover
Rio Tinto Alcan (RTA)
SSI UK (Sahaviriya Steel Industries)

Wales

Anglesey Aluminium (AA)
BP Amoco (British Petroleum)
Corus Plc.
TATA Steel



Health Improvement

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



Health Protection

Providing information, advice and taking action to protect people from communicable disease and environmental hazards



Health intelligence

Providing public health data analysis, evidence finding and knowledge management



Microbiology

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

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:



Safeguarding

Providing expertise and strategic advice to help safeguard children and vulnerable adults



Screening

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



Primary, community and integrated care

Strengthening public health impact through policy, commissioning, planning and service delivery



NHS quality improvement and patient safety

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



GIG
CYMRU
NHS
WALES

Iechyd Cyhoeddus
Cymru
Public Health
Wales

Further information

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Facebook: www.facebook.com/PublicHealthWales