# Impact of the Economic Shock on Health & Wellbeing

### About this briefing

This briefing summarizes evidence from literature on the health effects of unemployment and financial security due to economic decline.

#### Key points

- Income and employment are key social determinants of population health and health inequalities. Unemployment contributes to poor health while being in good employment is protective of health<sup>1</sup>.
- The greater one's income the less likelihood of disease and premature death<sup>2</sup>.
- Unemployment increases risk for mental illness
- Unemployment increases risk for physical illness

#### Background

On March 23rd, 2020, the UK government instituted a lockdown to slow the spread of the novel Coronavirus. The rapid and unexpected closure of businesses and restrictions in social interactions was a significant shock to the economy of the region and Birmingham directly affects employment, income, and financial security with impacts on the health and wellbeing of the population.

Birmingham has the highest claimant unemployment rate at 15.3% of the UK core cities (November 2020<sup>3</sup>.

A package of economic support was introduced by the UK government, these have mitigated some of the immediate effects of the economic shock by acting as a safety net for businesses and individuals.

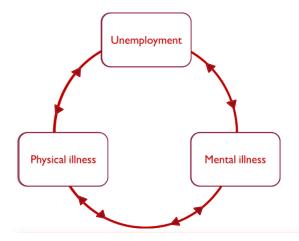
In the current economic shock due to the Coronavirus pandemic, individuals with jobs that can be done remotely are able to work from home and are less likely to experience job loss. Individuals in jobs that require physical presence are more likely to experience being furloughed, reduction in working hours or being laid off. This presents a risk of widening inequalities in employment and income. As employers introduce new ways to get work done some jobs may never return.

<sup>&</sup>lt;sup>1</sup> Fair Society Healthy Lives, the Marmot Review

<sup>&</sup>lt;sup>2</sup> How are Income and Wealth Linked to Health and Longevity?

<sup>&</sup>lt;sup>3</sup> Claimant Count Unemployment Monthly Update - November 2020 Data

## **Economic shock health and wellbeing**



- Unemployment increases risk for mental illness
- Unemployment increases risk for physical illness

#### Anxiety and Depression

- In the event of job loss, individuals are on average twice as likely to develop symptoms of anxiety and depression<sup>4</sup>.
- Transitions to inadequate employment, insecure or temporary employment, and income loss, are reported to all increase symptoms of anxiety and depression.
   Although the effect is less than that seen in involuntary job loss<sup>4</sup>.
- Reemployment in the previously unemployed reduces symptoms of depression and reduces the risk of experiencing severe symptoms of depression requiring the need for professional intervention<sup>5</sup>.
- Unemployment and loss of investment income is associated with population level increase in rates of depression.<sup>6</sup>

#### Substance Use and Abuse

- Unemployment increases the use of alcohol, cannabis, and other drugs<sup>4</sup>.
- Long-term unemployment increases the risk of heavy drinking by about 50%<sup>7</sup>.
- Increased unemployment is associated with excess alcohol related deaths in those under 65<sup>8</sup>.

<sup>&</sup>lt;sup>4</sup> The Health Effects of Economic Decline

<sup>&</sup>lt;sup>5</sup> <u>Unemployment, Reemployment, and Emotional Functioning in a Community Sample</u>

<sup>&</sup>lt;sup>6</sup> Evidence for the 2008 economic crisis exacerbating depression in Hong Kong

<sup>&</sup>lt;sup>7</sup> Is the duration of poverty and unemployment a risk factor for heavy drinking?

<sup>&</sup>lt;sup>8</sup> The public health effect of economic crises and alternative policy responses in Europe: an empirical analysis

#### Violent behaviour and domestic violence

- Unemployment increases the likelihood of violent behaviour among those laid-off compared to the those remaining in employment<sup>9</sup>.
- Unemployment increase the likelihood of children being hospitalized for abuse and neglect<sup>10</sup>.
- Evidence suggests that increase in male unemployment rate causes a decline in the incidence of physical abuse against women, conversely an increase in the female unemployment rate has the opposite effect<sup>11</sup>.

#### Suicide

- Being Unemployed is associated with a two to three-fold increase in suicide compared with the employed 12.
- Suicide rates increase as unemployment rises within the population<sup>13</sup>.

#### Cardiovascular disease

 Evidence on association between cardiovascular disease and unemployment varies between Europe and the U.S. In Northern European studies job loss is not associated with coronary heart disease mortality<sup>14</sup>. U.S cohorts however demonstrate that involuntary job loss later in life predicts increase risk of heart attack in subsequent years<sup>15</sup>.

#### Birth weight

 Unemployment or low employment may be associated with increased rates of low birth weight or very low birth weight<sup>16</sup>.

#### Infant mortality

• Increasing infant mortality rate is associated with increasing unemployment rates<sup>4</sup>.

#### General morbidity

 Unemployment is associated with increased risk of hospitalization due to alcohol related problems, road traffic accidents, and in men only, self-harm and mental health problems<sup>17</sup>.

<sup>&</sup>lt;sup>9</sup> Using ECA Survey Data to Examine the Effect of Job Layoffs on Violent Behavior

<sup>&</sup>lt;sup>10</sup> Growing Up with Unemployment: A Study of Parental Unemployment and Children's Risk of Abuse and Neglect Based on National Longitudinal 1973 Birth Cohorts in Denmark

<sup>&</sup>lt;sup>11</sup> Unemployment and Domestic Violence: Theory and Evidence

<sup>&</sup>lt;sup>12</sup> Unemployment and suicide. Evidence for a causal association?

<sup>&</sup>lt;sup>13</sup> Why are suicide rates rising in young men but falling in the elderly? —a time-series analysis of trends in England and Wales 1950–1998

<sup>&</sup>lt;sup>14</sup> The effects of workplace downsizing on cause-specific mortality: a register-based follow-up study of Finnish men and women remaining in employment

<sup>&</sup>lt;sup>15</sup> The impact of late career job loss on myocardial infarction and stroke: a 10 year follow up using the health and retirement survey

<sup>&</sup>lt;sup>16</sup> The Ecological Effect of Unemployment on the Incidence of Very Low Birthweight in Norway and Sweden

<sup>&</sup>lt;sup>17</sup>Job loss is bad for your health – Swedish evidence on cause-specific hospitalization following involuntary job loss

#### General mortality

• Job loss is associated with an increased risk of mortality<sup>18</sup>.

#### Diet

- Unemployment significantly impacts on diet composition; effect varies with duration of unemployment <sup>19</sup>.
  - Short term
    - Increase use of discount stores, increase in food expenditure, consumption of animal-based foods, saturated fat, total fat, protein.
  - Medium
    - Decreased food expenditure, consumption of fresh animal-based foods, saturated fat, total fat, protein.
  - Long term
    - Nutrient substituted by carbohydrates and added sugar.
- Decline in nutritional quality and food expenditure during economic recession varies by household type<sup>20</sup>. Households with children, pensioners, and single parent households experienced greater decline than other households. Showing greater substitution away from fruits and vegetables to processed foods.

#### **Smoking**

- Those who are unemployed are more likely to be current smokers or to have ever smoked than those in employment<sup>21</sup>.
- Older workers who are former smokers have over twice the odds of relapse following job loss than those who remain in employment. current smokers who do not obtain new employment are more likely to smoke more cigarettes on average following job loss<sup>22.</sup>
- Smokers have a lower likelihood to be reemployed at 1 year and are paid significantly less relative to non-smokers when reemployed<sup>23</sup>.

<sup>&</sup>lt;sup>18</sup> High local unemployment and increased mortality in Danish adults; results from a prospective multilevel study

<sup>&</sup>lt;sup>19</sup> The consequences of unemployment on diet composition and purchase behaviour: a longitudinal study from Denmark

<sup>&</sup>lt;sup>20</sup> Food expenditure and nutritional quality over the Great Recession

<sup>&</sup>lt;sup>21</sup> Cigarette smoking and employment status

<sup>&</sup>lt;sup>22</sup> The effect of involuntary job loss on smoking intensity and relapse

<sup>&</sup>lt;sup>23</sup> <u>Likelihood of Unemployed Smokers vs Non-smokers Attaining Reemployment in a One-Year Observational Study</u>

#### Equity statement

Health inequalities are unfair and avoidable differences in people's health across social groups and between different population groups. Health inequalities can occur by gender, income, social class, deprivation, educational status, ethnicity, and geography<sup>24</sup>.

Ethnic inequalities in labour market participation have remained persistent over time. There are considerable differences in unemployment rates between ethnic groups demonstrating continuing disadvantage. Employed people in certain minority ethnic groups are over-represented in certain occupations<sup>25</sup>.

#### Theory of Causation

Unemployment presents a shock to the whole system. It is a loss of not only the usual source of income, but also of your personal work relationships, daily structures, and sense of self-purpose. It is not uncommon to experience some of the same feelings and stresses as from serious injury, divorce, or the loss of a loved one<sup>26</sup>.

Economic shock leads to unemployment and there are several ways unemployment could lead to worsening health and wellbeing.

#### Decline in standard of living

Loss of income from job loss could lead to a decline in standard of living which could influence both physical and mental health of the unemployed. The severity of decline in standard of living depends on factors such as the unemployed persons assets, unemployment benefits available, income and assets of other household members, and the duration of unemployment<sup>27</sup>.

#### *Income insecurity*

Being unemployed could lead to anxiety about the length of income loss and the risk of future drop in standard of living. Joblessness can generate a feeling that life is not under one's control<sup>27,28</sup>.

#### Stigma and loss of self-esteem

Becoming unemployed can result in a drop in status among friends, family, and community at large<sup>27</sup>.

#### Loss of social contacts

Job loss typically results in a loss of contact with work colleagues and a shrinking of social networks. The loss of engagement and social capital can bring about a decline in personal wellbeing<sup>29</sup>.

<sup>&</sup>lt;sup>24</sup> Health inequalities - what are they and how do we reduce them?

<sup>&</sup>lt;sup>25</sup> Ethnic minority disadvantage in the labour market

<sup>&</sup>lt;sup>26</sup> https://cmha.ca/unemployment

<sup>&</sup>lt;sup>27</sup> Unemployment and mental health

<sup>&</sup>lt;sup>28</sup> Social Psychology, Unemployment and Macroeconomics

<sup>&</sup>lt;sup>29</sup> The social context of well-being

Declining economies affects physical and mental health and wellbeing through three broadly defined mechanisms.

#### Stress

declining economies increase the incidence of stressful job and financial events and that these events increase the likelihood of experiencing other stressors not intuitively associated with the economy (such as marital difficulties). There are reports of economic decline increasing the anticipation of stressful experiences, including job loss and difficulty meeting financial obligations<sup>4</sup>.

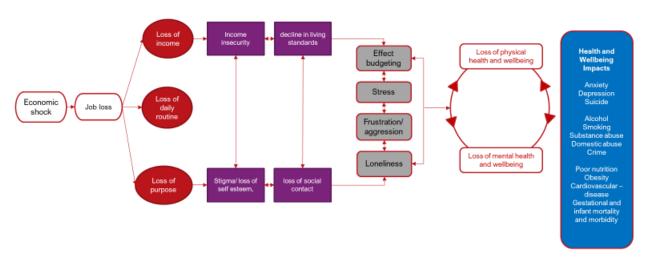
#### Frustration-aggression

This mechanism suggests that individuals denied an expected reward may experience psychosomatic precursors of aggression. Some exhibit antisocial behaviours, whereas others cope by using alcohol or drugs. The literature argues that contracting economies increase the perception of unfair loss of earned rewards, and thereby increase the incidence of intrafamily and workplace violence as well as substance abuse<sup>4</sup>.

#### Effect budgeting

This mechanism assume that we have limited time, energy, and money to manage our environments and experiences and we budget these resources in ways that reflect expected costs and benefits. It asserts that following job loss individuals will allocate available resources away from existing investments if it ranks relatively low in in the hierarchy. (e.g., exercise, socially supportive behaviour, medication, good nutrition, surveillance of one's own or others' biology or behaviour) and thereby increase his or her risk of illness<sup>4</sup>.

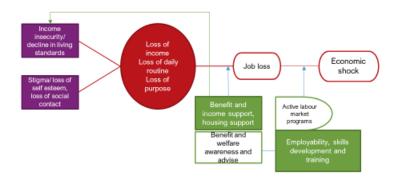
# Economic Shock: Impact on health and wellbeing



#### Framework for intervention

A framework for intervention was developed based on the theory of causation.

# Economic shock, job loss and primary effects



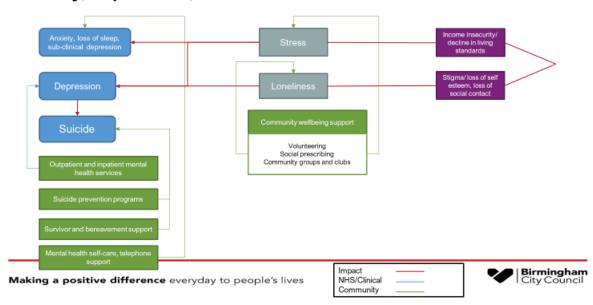
#### Primary effects

Stress, lonliness, frustration-aggression, and effect budgeting could be addressed through interventions designed to prevent further progression towards decline of health and wellbeing. Interventions preventing or delaying job loss, or speeding up reemployment will prevent material depravation.

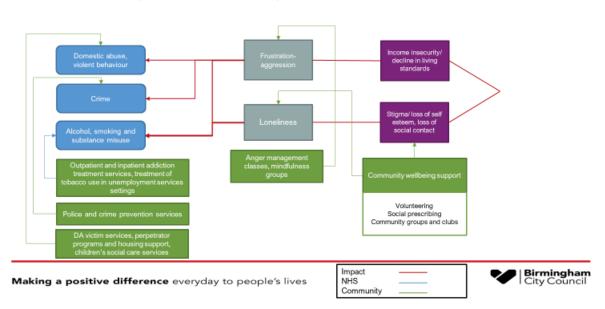
Stress	Lonliness	Frustration-	Effect budgeting
		aggression	
Talking therapies	Groups or classes	Assertiveness	Income support
• CBT	focused on	training.	and
<ul> <li>Mindfulness-</li> </ul>	activities of		Benefits, housing
based stress	interest.	Anger	support, and
reduction		management	welfare awareness
<ul> <li>Ecotherapy</li> </ul>	Volunteering	classes.	and advise.
Complimentary and			
alternative therapies			Re-employment:
<ul> <li>Yoga and</li> </ul>			employability skills
meditation			development and
<ul> <li>Acupuncture</li> </ul>			training.
<ul> <li>Aromatherapy</li> </ul>			
<ul> <li>Massage</li> </ul>			

When primary effects progress to decline in physical or mental health and wellbeing, various Clinical/NHS, and community/third sector interventions will aid recovery.

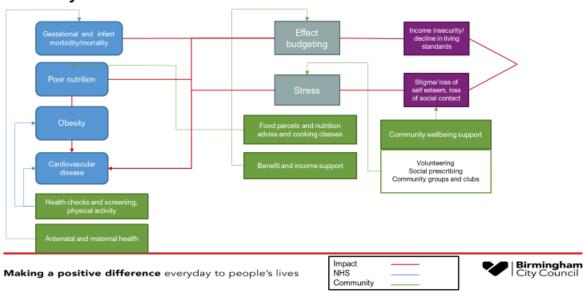
# Anxiety, depression, suicide



# Domestic abuse, violent behaviour, alcohol and substance misuse



# Poor nutrition, cardiovascular disease, gestational and infant morbidity/ mortality



#### Quantitative estimates

#### Macroeconomic conditions and health

There is evidence of an inverse relationship between economic performance and health outcomes<sup>30</sup>.

- A 5 percent fall in employment could lead to 7-10% rise in prevalence of chronic conditions.
- Translating to about 900,000 more people of working age with chronic diseases.

#### Approach

Utilize quantitative evidence of changes in employment levels and impact on prevalence of chronic diseases and in turn on demand for services.

- Based on framework for intervention, identify data sources required to model change in disease prevalence and service demand.
- Required
  - Disease prevalence measures
  - Services activity levels
- Modelling to carried out in by BI team.

#### Outputs

• A modelling tool quantitative estimates of changes to economic indicators and effect on disease prevalence and service demand.

 A planning tool kit to support population health and wellbeing in the context of a significant economic shock within the city.

<sup>&</sup>lt;sup>30</sup> Macroeconomic conditions and health