



Home Office

The economic and social costs of modern slavery

Research Report 100

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The views expressed in this report are those of the authors, not necessarily those of the Home Office (nor do they reflect government policy)

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Executive summary

The aim of this report is to estimate the cost of modern slavery in the UK in order to better understand the impact of this crime. By contributing to the evidence base in this way, the research is intended to inform the policy and operational response and better understand the value of preventative work.

This report follows the methodology used in 'The Economic and Social Costs of Crime' (Heeks *et al.*, 2018) and adapts it where necessary to reflect some of the particular characteristics of this offence type.

The framework for estimating the cost of crime breaks down the costs into three distinct areas of cost:

- In anticipation (expenditure on protective and preventative measures).
- As a consequence, including physical and emotional harms, lost time and output, health and victim services.
- In response, including police costs and costs to the criminal justice system.

This same framework is adopted to estimate the costs of modern slavery with the same methods also generally applied within this framework; however, it has **not been possible to estimate the costs to the criminal justice system.**

Additional data was collected to fill evidence gaps, and adaptations were made to take into account particular features of modern slavery offences. In particular, to inform the costs, interviews with 17 support providers and four police officers were undertaken to provide estimates for the number of violent and sexual offences typically experienced by victims of modern slavery during their exploitation, as well as the duration of exploitation and the physical and emotional harms experienced. Findings from these interviews were then applied to the same Quality Adjusted Life Year (QALY) methodology for estimating the costs of the physical and emotional harms, and also used in the estimates of lost time and output, and health services. However, it should be noted that these findings rely on the perceptions of the interviewees of what constitutes a typical case of each type of modern slavery rather than being informed by a representative survey of actual victims (such as the Crime Survey for England and Wales that informs the cost of crime estimates).

For the purposes of this analysis, costs for three broad exploitation types – labour exploitation, domestic servitude and sexual exploitation – have been estimated. However, recent research (Cooper *et al.*, 2017) has identified 17 types at a more granular level, and many victims will experience more than one type.

Unlike many crimes, modern slavery is not a single time-limited event. The interviews revealed that the median perceived duration of exploitation ranges from nine months for labour and

sexual exploitation to 24 months for domestic servitude. During the period of exploitation, a number of violent and sexual offences can repeatedly occur. The frequency of rape and other sexual offences reported to be experienced in typical cases of sexual exploitation was particularly high, amounting to several hundred offences of each type during the period of exploitation. These high numbers of offences result in overlapping injury durations. To estimate the physical and emotional harms of these, an additive approach has been used. Each subsequent injury causes the same reduction in QALY as the initial injury, even if they overlap.

The estimated unit costs (cost per victim of exploitation in the UK) for each type of modern slavery are shown in Table 1 below. The physical and emotional harms to victims represent by far the biggest component of the unit cost.

Domestic servitude is the exploitation type with the highest estimated unit costs. The long duration of this form of exploitation, as reported by interviewees, results in higher associated physical and emotional harms and lost time and output (relative to other types of modern slavery).

Table 1: Estimated unit costs of modern slavery in the UK by category, 2016/17¹

Unit costs	Anticipation	Physical and emotional harm	Lost output and time	Health services	Victim services	Law enforcement costs	Total
Labour exploitation	£210	£268,450	£40,330	£470	£1,630	£7,730	£318,810
Sexual exploitation	£210	£270,890	£37,460	£1,560	£1,650	£7,730	£319,500
Domestic servitude	£210	£281,150	£98,890	£390	£1,710	£7,730	£390,080
Average (weighted mean)²	£210	£271,190	£47,040	£910	£1,650	£7,730	£328,720

The unit costs for modern slavery can be ‘scaled up’ to estimate costs for all *suspected victims* in a particular year, as measured by those confirmed as victims of UK-based exploitation (or pending a final decision) via the National Referral Mechanism, or for *total victims*, as estimated by means of ‘multiple systems estimation’ (MSE) (Home Office, 2014). The costs to suspected victims are displayed in Table 2. Here, the estimated total costs for suspected victims of domestic servitude are lower than for other types of exploitation due to the lower number of suspected victims. The total cost to suspected victims is highest for labour exploitation because of the higher number of suspected victims.

¹ All the cost estimates included within this report have been rounded. There may be discrepancies in the total figures due to the effect of this rounding.

² This average has been produced by weighting the unit costs of exploitation types by the number of suspected victims. This therefore represents a unit cost of modern slavery.

Table 2: Total costs of suspected victims of modern slavery in the UK by category, 2016/17

Total costs	Anticipation	Physical and emotional harm	Lost output and time	Health services	Victim services	Law enforcement costs	Suspected victims
Labour exploitation	£0.14m	£181.2m	£27.2m	£2.4m	£8.4m	£39.7m	£259.1m
Sexual exploitation	£0.13m	£171.2m	£23.7m	£7.5m	£7.9m	£37.2m	£247.6m
Domestic servitude	£0.04m	£57.4m	£20.2m	£0.6m	£2.7m	£12.0m	£92.8m
Total	£0.31m	£409.8m	£71.1m	£10.5m	£19.0m	£88.9m	£599.5m

Some of the cost categories do not apply to victims who are not in contact with services. When estimating the overall costs to society of modern slavery, costs of victim services, health services and law enforcement are only scaled up for suspected victims and no further. When scaling up further to the estimates of all victims (where applicable) the estimated total costs are between £3.3bn and £4.3bn (see Table A1 for a full breakdown of the total costs). The range represents the uncertainty associated with the estimate of total victims, which is between 10,000 and 13,000.

It should be noted that this scaling up of the unit costs to estimate an overall cost to society relies on certain assumptions. The most important one (by virtue of its contribution to the overall estimate) is that the physical and emotional harms experienced by known victims (on which data was gathered through interviews with support workers and police officers) are similar to those of victims who are not in contact with support providers or the police.

1. Introduction

The Economic and Social Costs of Crime (Heeks *et al.* 2018) presents the estimated costs to society of traditional victim-based crime. Modern slavery is a crime type on which there is less data and evidence than other crime types as the victims of modern slavery are much more likely to be 'hidden', 'hard to reach' groups (e.g. victims of human trafficking) who are not likely to be captured by surveys of the general household population (such as the Crime Survey for England and Wales (CSEW), which is a key source for the Economic and Social Costs of Crime).

The aim of this report is to estimate the cost of modern slavery in the UK. Improving understanding of the impact of this crime can help direct policy and operational efforts to lessen its effects and to better appreciate the value of preventative efforts.

This report follows the methodology used by Heeks *et al.* (2018) and adapts it where necessary to reflect some of the particular characteristics of this offence type.

1.1. The crime of modern slavery

Modern slavery is an umbrella term that encompasses the offences of human trafficking and slavery, servitude, forced or compulsory labour, as set out in the different anti-slavery legislation in place in the four UK countries (England, Wales, Scotland and Northern Ireland; see Table A2 for further details).

Unlike most crimes, which are time-limited single events, modern slavery is a hidden crime of indeterminate duration. The crime is usually made up of a series of different events, often taking place in different countries, frequently involving multiple victims and offenders, who may be involved at different times. Modern slavery crimes often consist of three stages: recruitment, exploitation and (usually but not always) transportation.

Modern slavery offences tend to involve, or take place alongside, a wide range of abuses and other criminal offences such as grievous bodily harm, assault, rape or child sexual abuse. Not all cases that may have involved modern slavery are prosecuted as such, particularly when the other offences involved may carry similarly severe sentences. Law enforcement and prosecutors can use the full range of offences available in each case to disrupt this crime.

The diversity of modern slavery is captured in previous Home Office research to develop a typology of modern slavery offences (Cooper *et al.*, 2017). This research identified 17 types of modern slavery, falling under four main categories: labour exploitation, sexual exploitation, domestic servitude and criminal exploitation.³

³ Criminal exploitation is not able to be costed as a separate category in the ensuing analysis as it cannot be clearly identified in the National Referral Mechanism statistics on known victims. In these data, criminal exploitation will be included under the labour exploitation category.

1.2. Modern slavery in the UK

The nature of the crime of modern slavery means that it is challenging to accurately measure its scale.

The best available estimate of the prevalence of modern slavery in the UK was produced by the Home Office in 2014 using a multiple systems estimation (MSE) technique (Home Office, 2014). It suggested that in 2013 there were 10,000 to 13,000 potential victims of modern slavery in the UK.

There has been a consistent and sustained increase in the number of potential victims of modern slavery identified in the UK since 2009 – likely due to the increased priority of tackling modern slavery and improved awareness of this crime. In 2017, 5,145 potential victims were referred to the National Referral Mechanism (NRM) – the UK’s framework for referring and supporting victims. This was a 35% increase compared to the previous year (National Crime Agency, 2018).

In England and Wales, modern slavery was introduced as a separate crime-recording category in April 2015.⁴ In the year to March 2017, police in England and Wales recorded 2,255 modern slavery crimes, Police Scotland recorded 60 crimes and the Police Service of Northern Ireland recorded 35 modern slavery offences (HM Government, 2017).

1.3. Previous research

There has been previous research into the health impacts of human trafficking. A systematic review from 2016, focusing on studies of the prevalence of violence and physical, mental and sexual health outcomes in human trafficking, found 31 eligible studies (Ottisova *et al.*, 2016). The main focus of these studies was the trafficking of women and girls for sexual exploitation with less evidence available on the harms associated with other forms of exploitation, and for men or boys. In addition, most of the studies identified in the review were conducted in ‘low- and middle-income’ countries, so the applicability of findings to the UK is questionable.

Previous UK studies have attempted to fill these gaps. A 2014 study by Turner-Moss and colleagues analysed anonymised case records of adults (mostly male) trafficked to the UK for labour exploitation. However, the authors acknowledge that the study was limited by its small, unrepresentative sample of cases, which was taken from a single non-governmental support provider.

Despite the limitations of previous work, the studies highlight the serious and wide-ranging nature of physical and mental health impacts of modern slavery. A recent rapid evidence assessment on modern slavery and public health, commissioned by Public Health England, summarised the findings from 17 studies. This review emphasised how the consequences of modern slavery were dependent upon the type of exploitation, with physical injury particularly associated with forced labour, and sexually transmitted infections with sexual exploitation. Poor mental health was also found to be prevalent amongst victims of trafficking in the studies covered, particularly post-traumatic stress disorder (PTSD), stress and anxiety (Such and Salway, 2017).

⁴ The Home Office Counting Rules for Recorded Crime set out guidance for police forces in England and Wales for recording modern slavery crimes. Modern slavery crimes should be recorded in addition to the most serious additional victim-based offence involving the same victim–offender relationship.

2. Methods

Some of the distinct qualities of modern slavery as a crime type mean that the methodology used to estimate the costs of crime need to be adapted for modern slavery. This section gives a summary of the methods used in the main costs of crime estimate and outlines how it has been adapted for the purposes of estimating the costs of modern slavery.

The cost of crime methodology only considers direct costs, those that can be completely attributed to the relevant crime type(s). This means that any costs that cannot be differentiated and allocated to modern slavery are excluded. The estimate of the costs of modern slavery also relates particularly to cost to the UK, so will exclude any costs of exploitation that only occurs abroad. The cost relates to the number of victims within a particular period (2016/ 17 financial year for this estimate), because they are based in this way, even if the duration of the harms that they suffer is longer the associated costs have been included.

The framework for estimating the cost of crime breaks down the costs into three distinct areas of cost:

- in anticipation;
- as a consequence – including physical and emotional harms, lost time and output, health and victim services;
- in response – including police costs and costs to the criminal justice system (CJS).

These same areas of cost have been used in relation to modern slavery although the coverage and methodology used differs.

2.1. Costs in anticipation

In the cost of crime estimate, this section is made up of insurance administration costs and defensive expenditure, such as locks and burglar alarms. Some of these categories are not directly applicable to modern slavery, as insurance is not taken out for protection against modern slavery. However, private parties do spend money to defend themselves from modern slavery because there is business expenditure to comply with legislation on Transparency in Supply Chains. As well as this cost to business, this section also includes government expenditure on measures to prevent modern slavery.

2.2. Costs as a consequence

2.2.1. Physical and emotional harms

To quantify this cost the Quality Adjusted Life Year (QALY) method is used. The same approach was adopted in 'Economic and Social Costs of Crime' (Heeks *et al.*, 2018) based on the work of Dolan *et al.* (2005). This approach finds the percentage by which the victim's

health-related quality of life is estimated to be reduced (the QALY loss) by suffering particular injuries.

The physical and emotional harm to the victims is calculated as the likelihood of sustaining physical and emotional injuries (LIKE) multiplied by the percentage reduction in health-related quality of life (REDUCEQL) multiplied by the duration of the injury (DUR) as a fraction of a total year. This is then combined with the value of a year of life at full health (VOLY) to give an estimate of the average cost. The formula is as follows:

$$\text{LIKE} * \text{REDUCEQL} * \text{DUR} * \text{VOLY} = \text{Average physical and emotional cost}$$

In 'Economic and Social Costs of Crime' (Heeks *et al.*, 2018) CSEW provides an estimate of the likelihood of sustaining particular injuries as a result of each crime type. The reduction in quality of life is taken from the most recent disability weights in the Global Burden of Disease study (Salomon *et al.*, 2015); Dolan *et al.* (2005) provides most of the information on the duration of injuries; and the value of a life at full health is taken from the Department of Health. However, the Crime Survey does not cover modern slavery as the victims would not be well captured in a survey of the household population. In order to apply this approach to modern slavery, structured interviews with support workers and police officers were carried out in order to estimate the number of incidents of violence and sexual offences that victims of modern slavery typically experience. The Crime Survey estimates of injuries associated with these types of offences could then be applied.

The survey involved interviews with four police officers identified by the National Policing Lead for Modern Slavery as having experience on operations involving more than five victims or offenders. They were selected on this basis because they were regarded as having had the broadest experience with victims. The officers interviewed came from Avon and Somerset, Greater Manchester, West Midlands and Police Scotland. Seventeen support workers involved with organisations sub-contracted on the Victim Care Contract to provide support to victims of modern slavery in England and Wales were also interviewed. All support providers involved with the Victim Care Contract were approached and eight organisations offered to participate in the research (see Table for the list of organisations involved in the interviews).

As well as asking about the number of violent and sexual offences experienced in typical cases of modern slavery, the interviews also asked about specific types of injuries not covered in the Crime Survey (back pain, malnutrition, sexually transmitted infections and miscarriage) as well as further emotional harms (fear, anxiety, and alcohol and drug dependency) and the duration of the exploitation, which was then used to calculate the physical and emotional costs as outlined above (and in some of the other costs described below).

Unlike the Crime Survey, the interviews did not directly ask victims about their experiences of modern slavery. This was partly in consideration of the ethical issues of asking victims about previous traumatic experiences. In addition, an advantage of interviewing support providers and police officers is that they have seen many victims over time so can give a view of the 'typical' case, while each individual victim's experience of modern slavery will be different, requiring a larger sample to generate a 'typical' picture. Nevertheless, it should be acknowledged that the chosen approach relies on the perceptions of support providers and police officers with relevant experience of working with victims. These perceptions could be

skewed by their own experiences of particularly recent or notable cases, providing a note of caution around the interpretation of these findings.

In addition, there are some adaptations necessary to the methodology used in Heeks *et al.* (2018) to estimate physical and emotional harms due to the high degree of repeat victimisation in modern slavery, causing a co-occurrence of resultant physical injuries (i.e. new injuries are inflicted before previous ones have been able to heal). However, there is no consensus in the health economics literature on how to deal with this issue (Ara and Wailoo, 2010). Two main approaches were considered – additive and multiplicative. With the additive approach each overlapping injury incurs the same QALY loss, while with the multiplicative approach overlapping injuries result in successively less reduction in QALY. The multiplicative approach contains the debatable implication that subsequent injuries are not as ‘bad’ as the first. The additive approach has been adopted in this analysis.

To account for the additional impact on underage victims, the physical and emotional harms suffered by those under 18 have been weighted using a multiplier of 1.21. The multiplier is based on evidence from a study by the Minnesota Department of Health (2007) which compared the adult and child costs for rape and sexual assault and showed that the physical and emotional costs are relatively worse for children than adults.

2.2.2. Health services

The estimates of health service costs are based on assumptions about the treatment that is likely to be required for certain injuries and the prevalence of the injuries for violent and sexual incidents (estimated using the CSEW). Physical harms are associated with ambulance costs and medical procedure costs, and the emotional harms from violent crimes are associated with counselling costs. The unit costs of healthcare activities used are from Curtis and Burns (2015) and NHS Reference Costs (Department of Health, 2015) as estimated by Heeks *et al.* (2018). However, these have been adapted based on responses from support workers and police to interview questions regarding whether victims typically receive medical treatment for their injuries.

NHS Reference Costs (Department of Health, 2016) have also been used to estimate the health costs associated with harms that are not captured in the CSEW. These costs are back pain, sexually transmitted infections, miscarriage and childbirth costs, which were captured via the interviews with support workers and police.

2.2.3. Lost time and output

Some victims of modern slavery would have otherwise been in legitimate employment, and this cost to society is captured as lost output. For the time that victims would not have been at work, and for victims that would not have been in employment, the cost to society is captured at the opportunity cost of lost time. For each of these estimates, the duration of time in exploitation, as gathered from the interviews with police and support workers, is multiplied by the average hourly wage (including on-costs such as national insurance contributions) for lost output and the opportunity cost of a non-working hour for lost time. Lost output is only calculated for European Economic Area (EEA) victims, based on the assumption of 260 working days a year. In the absence of robust data on the proportion of victims with the right to work in the UK, it is assumed

that all non-EEA nationals would not have been working in the UK if they were not victimised. This assumption means that our figures may underestimate the total cost.

2.2.4. Victim services

This covers government expenditure on services for victims, including the NRM, through which victims of modern slavery are identified and supported. The cost of the Victim Care Contract in England and Wales, through which The Salvation Army and other sub-contracted providers provide support for victims as part of the NRM is also included here. Charities also provide support for victims of modern slavery. Nine charities were contacted in order to request information on their expenditure on victims of modern slavery but only three were able to provide expenditure figures.

2.3. Costs in response

2.3.1. Police response

In 'Economic and Social Costs of Crime' (Heeks *et al.*, 2018), police costs are based primarily on activity-based costings (ABC) data collected during 2006/07 (which covered the time spent by police officers and staff on a range of different activities) updated to 2016/17 crime levels and adjusted to reflect changes in crime categories and resources police allocated to certain activities. This is then used to estimate the proportions of the police budget spent on different crime types and then validated and triangulated through a variety of different methods. ABC data is not available for modern slavery offences. Instead, internal analysis by the Office for Security and Counter-Terrorism (OSCT) in the Home Office of expenditure on modern slavery across law enforcement agencies and government departments has been used in this estimate.

2.3.2. Criminal justice system costs

It has not been possible to estimate the cost to the CJS for a number of reasons. Modern slavery offences that go through the CJS are long and complex and can often take up to two years to complete. This is reflected in the proceedings data for these offences. The cost model that the Ministry of Justice used to estimate the cost of other crime types relies on a full set of data to profile the cost through the courts for a given year. Because of the lags from a criminal proceeding being commenced to its disposal, the data for all modern slavery offences produces results that are not reliable.

An alternative approach, costing the old trafficking offences rather than the Modern Slavery Act 2015 offences, was explored but displayed the same issues. Modern slavery cases are very different from cases of other crime types and different from each other. This means that applying average costs and average durations to modern slavery offences could produce misleading and inaccurate results.

Something else to note is that as more modern slavery cases are identified and as maximum prison sentence lengths have increased since before the 2015 Act, the cost to the CJS is likely to increase over the near future.

It is recommended that any future updates of this report reassess the CJS data to see if it is possible to estimate the cost of modern slavery to the CJS.

2.4. Unit costs and total costs

Several of the costs included in the estimate (physical and emotional harms, lost time and output, health services) are 'bottom-up' costs producing unit costs (i.e. costs per victim) which then need to be 'scaled up' to give an estimate of total costs by multiplying by the cost of suspected or total estimated victims. Costs of physical and emotional harms and lost time and output apply to both suspected and unknown victims so can be scaled up by both measures. However, health service costs only apply to suspected victims who are in contact with services so are applied to the numbers of suspected victims to generate total costs.

Other costs (in anticipation, victim services and law enforcement) are 'top-down', as the methods used produce an initial total cost. These estimates then need to be converted into unit costs by dividing by the number of victims. These top-down costs are divided by the midpoint estimate of total victims (11,500) produced by MSE (Home Office, 2014) to generate a cost per 'average' victim, irrespective of whether they come to the attention of agencies or not. This is the same approach as adopted in the cost of crime by Heeks *et al.* (2018) where unit costs are calculated on the basis of all crimes rather than crimes recorded by the police.

3. Findings

3.1. Costs in anticipation of modern slavery

This section outlines the estimates of the costs in anticipation of modern slavery. This includes government expenditure on measures to prevent modern slavery, as well as expenditure by businesses to comply with requirements for demonstrating transparency in their supply chains.

3.1.1. Government expenditure

In July 2016, the prime minister announced that the government would launch a dedicated £33.5 million official development assistance (ODA) Modern Slavery fund. As this paper aims to estimate the cost of modern slavery in the 2016/17 financial year, only the proportion of the ODA fund that was spent in this year is included.

During 2016/17, £905,000 of the fund was used for targeted projects to tackle modern slavery in source countries and reduce the number of people being trafficked to the UK.

The funding was predominantly used to deliver a communications campaign to raise awareness of slavery in England and Wales. The campaign aimed to educate the public and small- and medium-sized businesses on different types of slavery and to increase their propensity to report suspicious activity.

Some of these funds were used to review local authority support for trafficked children and some was used for small UN grants which allowed the pursuit of perpetrators. These endeavours are arguably not focused on prevention, but as the majority of the £905,000 was spent on prevention-focused campaigns, the whole cost is taken to be an anticipation cost to society.

3.1.2. Business expenditure

Section 54 of the Modern Slavery Act 2015 requires that any commercial organisation supplying goods or services in any sector carrying out its business or part of a business in the UK and above a specified total turnover must produce a slavery and human trafficking statement for each financial year of the organisation. The slavery and human trafficking statement should set out what steps organisations have taken to ensure modern slavery is not taking place in their business or supply chains. Regulations have set the total turnover threshold at £36 million. An Impact Assessment carried out in 2015 estimated that the annual average cost to affected businesses in the UK for meeting this requirement was £1.4 million.⁵ As these costs were estimated with a 2015 base year they needed to be updated with inflation (HM Government, 2018), the estimated annual cost is therefore estimated at £1.5 million.

⁵ https://www.legislation.gov.uk/ukia/2015/268/pdfs/ukia_20150268_en.pdf

Total costs in anticipation of modern slavery in 2016/17 from both government and business expenditure were £2.4 million.

3.2. Costs as a consequence of modern slavery

This section outlines the estimates of the costs as a consequence of modern slavery, which are:

- physical and emotional harms to the victim
- health service costs
- lost time and output
- victim services costs

3.2.1. Physical and emotional harms to the victim

Some victims of modern slavery will suffer substantial physical injuries and most are likely to suffer some degree of emotional harm.

Table 3 below shows the median number of violence with injury offences, rapes and other sexual offences that a victim experiences within the complete duration of a typical case of modern slavery, based on interviews with support workers and police officers.⁶ Most of the interviewees gave relatively precise responses on the frequency of the occurrence of these offences (e.g. ‘daily’, ‘weekly’ or giving a specific percentage of victims), while others were more vague (e.g. ‘often’, ‘frequently’). The former could be readily converted into quantitative figures of the number of offences per victimisation, while the latter required some interpretation. Table 3 shows the particularly high levels of sexual and violent offences experienced by victims of sexual exploitation. Where the numbers that are less than one, for example violence with injury in labour exploitation, these imply that a victim has a 75% chance of being a victim of a single offence of this crime type.

Table 3: Estimates of the number of violent and sexual offences experienced in typical cases of modern slavery, as perceived by interviewees, by exploitation type

Offence type	Type of modern slavery		
	Labour exploitation	Sexual exploitation	Domestic servitude
Violence with injury	0.75	34	11
Rape	0	388	1
Other sexual offences	0	407	1

The prevalence of crime types in Table 3 are multiplied by the probability of a victim suffering different injuries as a result of that crime, presented in Table A5 (derived from analysis of the

⁶ The median rather than the mean figures has been used as the measure of central tendency in the analysis because there was an observed data distribution that was skewed by outliers. Descriptive data on the estimated durations, number of violent sexual incidents and the likelihood of other harms experienced in typical cases of modern slavery, as perceived by interviewees, is presented in Table .

2015/16 CSEW by Heeks *et al.*, 2018) to produce a figure for the number of each injury type associated with each exploitation type (Table 4).

Table 4: Estimates of prevalence of injuries as a result of violent and sexual offences in typical cases of modern slavery, as perceived by interviewees, by exploitation type

Injury	Labour exploitation	Sexual exploitation	Domestic servitude
Minor bruising	0.44	117.3	6.80
Severe bruising	0.21	32.40	3.20
Scratches	0.16	47.10	2.50
Cuts	0.21	83.00	3.20
Stabbed	0.03	1.20	0.40
Broken bones	0.05	8.20	0.69
Nose bleed	0.05	3.10	0.79
Broken nose	0.01	0.57	0.19
Lost teeth	0.01	0.61	0.20
Chipped teeth	0.01	0.61	0.20
Dislocation	0.02	0.69	0.23
Concussion	0.02	18.10	0.31
Internal injury	0.01	0.29	0.10
Facial injury	0.01	11.80	0.13
Eye injury	0.00 ⁷	0.12	0.04
Other	0.06	0.03	0.95

Under the assumption that there is an even distribution of harms through the exploitation period, the likelihood of experiencing any of these physical injuries on any given day during exploitation is then calculated by dividing the prevalence of injuries for each exploitation type (shown in Table 4) by the perceived duration of each exploitation type, as reported by interviewees (as displayed in Table 5). Domestic servitude has a particularly long perceived duration.

Table 5: Estimated duration of modern slavery, as perceived by interviewees, by exploitation type

Modern slavery type	Median duration of exploitation (days)
Labour exploitation	274
Sexual exploitation	274
Domestic servitude	730

⁷ For victims of labour exploitation there was a 0.3% likelihood that they would incur an eye injury during their exploitation period.

This likelihood (LIKE) of experiencing a physical injury on any given day during exploitation then forms the basis of the calculation first given in section 2.2.1:

$$\text{LIKE} * \text{REDUCEQL} * \text{DUR} * \text{VOLY} = \text{Average physical and emotional cost}$$

Table A6 shows the QALY loss (REDUCEQL) and Table shows the duration (DUR) associated with each injury that is then multiplied by the VOLY to estimate the cost of harm for each injury. The VOLY used in this report is based on the Department of Health’s value of a statistical life year of around £60,000 (2012 prices). This has been adjusted to 2017 prices by the value of nominal gross domestic product (GDP) per head,⁸ resulting in a figure of around £70,000.

Worked example

The median perceived length of sexual exploitation is 9 months (274 days), and victims suffer an estimated 117 minor bruises during this period,

The probability of a minor bruising occurring on any given day is given by dividing the number of injuries by the period of exploitation ($117/274 = 0.43$).

Multiplying by the associated quality of life loss (for minor bruising, 2.6%) gives the loss per day ($0.4 * 2.6\% = 1.1\%$).

This probability is multiplied by the duration of the harm (10.5 days). This gives the average loss per injury each day ($10.5 * 1.1\% = 11.6\%$).

This is then scaled up to give the proportion of the year’s quality of life lost given the duration of slavery – $11.6\% * (274/365) = 8.7\%$ of a year.

As part of the interviews with support providers and police officers, questions were also asked about the likelihood of emotional harms (fear, anxiety, and alcohol and drug dependency) and some additional physical harms (back pain, malnutrition, sexually transmitted infections and miscarriage), which are not included in the CSEW. Table 6 shows the median perceived likelihood of experiencing these harms in different types of modern slavery, according to the interviewees. These findings demonstrate the apparent high prevalence of depression, fear and anxiety across all exploitation types.

Table 6: Perceived likelihood of suffering additional physical and emotional harms in typical cases of modern slavery, by exploitation type

Harm	Type of modern slavery		
	Labour	Sexual	Domestic
Drug dependency	5%	5%	1%
Alcohol dependency	28%	5%	5%
Fear and anxiety	100%	100%	100%
Depression	100%	100%	100%
STI	0	50%	5%

⁸ <https://www.ons.gov.uk/economy/grossdomesticproductgdp/timeseries/ihxt/pn2>

Harm	Type of modern slavery		
	Labour	Sexual	Domestic
Miscarriage	0	25%	0%
Back pain/aches	75%	88%	75%
Malnutrition	100%	100%	88%

For the emotional harms, sexually transmitted infections, and drugs and alcohol dependency, it is assumed that these occur for the duration of exploitation as well as the recovery period associated with the illness. Where the duration of harm is greater than a year, the cost of the harm is discounted in accordance with 'The Green Book: appraisal and evaluation in central government' (HM Treasury, 2018).

The specific cost of each individual harm type is then summed to give a total physical and emotional cost for each of the three main types of modern slavery. Table 7 shows these estimated costs. This table demonstrates that the majority of the costs of harms related to modern slavery are not physical but emotional. While estimated physical costs are highest for sexual exploitation, the estimated emotional costs are highest for domestic exploitation, which is a result of the particularly long perceived duration of this exploitation type (see Table 8). The higher emotional costs of labour exploitation compared with sexual exploitation arises from higher perceived prevalence of alcohol dependency amongst victims of labour exploitation.

Table 7: Estimated unit costs of physical and emotional harms of modern slavery

Modern slavery type	Emotional	Physical	Total
Labour exploitation	£256,940	£11,510	£268,450
Sexual exploitation	£229,480	£41,420	£270,890
Domestic servitude	£259,440	£10,590	£281,150

3.2.2. Health services

This section captures the cost to the NHS and other healthcare providers to treat physical and mental health issues associated with modern slavery victimisation.

The interviewees were asked how often victims receive treatment for their injuries and mental health issues. Almost all said that it was not common for victims to be treated during victimisation, but that all victims were referred to a GP when they enter support. For these estimates, it has been assumed that all suspected victims exploited in the UK, as identified through the NRM, receive medical treatment for the harms that they are likely to be suffering on their last day of exploitation.

The average treatment costs, as estimated by Heeks *et al.* (2018), and additional treatment costs derived from NHS Reference Costs (2016) for the harms that were not included within the CSEW (shown in Table) were then multiplied by the number of likely injuries the victim will be suffering at the end of their exploitation period. During the interviews, the likelihood of

victims being pregnant because of their exploitation was also asked. The resulting healthcare cost of childbirth has also been included.

Once the average costs in Table A8 have been multiplied by the likelihood of that injury being suffered, the unit injury costs are summed to give us a total unit health cost for each type of modern slavery. Table 8 shows the final health costs per victim.

Table 8: Estimated unit costs of healthcare associated with each type of modern slavery

Modern slavery type	Emotional	Physical	Total
Labour exploitation	£3,310	£250	£3,560
Sexual exploitation	£2,710	£9,120	£11,830
Domestic servitude	£2,620	£380	£3,000

The estimated total healthcare costs included within this analysis underestimate the true extent of healthcare costs as a result of modern slavery. No health service costs have been estimated for those exploited overseas while they are within the NRM. This estimate also does not include any health service costs from unknown victims who independently sought medical assistance.

3.2.3. Lost output and time

This section aims to estimate the cost of the time and output that victims lose while they are being exploited. Some victims would have otherwise been in legitimate employment, and this cost to society is captured as lost output. For the time that victims would not have been at work, and for victims that would not have been in employment, the cost to society is captured as the opportunity cost of lost time. This is because their time may have been better spent on other, legitimate activities.

In the absence of robust data on the proportion of victims with the right to work in the UK, it is assumed that all non-EEA nationals would not have been working in the UK if they were not victimised.

Lost output

Based on CSEW data, Heeks *et al.* (2018) estimate that 64% of adult victims of violent crime are employed. Due to the lack of evidence on the employment of victims of modern slavery, it is assumed that 64% of adult victims from EEA countries would have been in legitimate employment if they were not victimised. Assuming that adult victims from EEA countries would have worked for 260 days per year⁹ for an annual average of 1,676 hours,¹⁰ an average working day of 6.45 hours has been used for this analysis. This time is multiplied by the average hourly wage (£18.80 including on-costs such as national insurance contributions¹¹) to

⁹ Five working days a week, multiplied by 52 weeks

¹⁰ United Kingdom average annual hours actually worked per worker (OECD, 2017)

¹¹ Average weekly earnings of £502 (Office for National Statistics, 2017) increased to a yearly average and then divided by the UK's average annual actual hours worked (OECD, 2017) to obtain an hourly average rate. This rate is then uprated by 20% to take into account non-wage costs (Eurostat, 2016).

give £121 as a daily loss of earnings per working day. For each exploitation type, this figure of £121 is multiplied by the median number of working days of the exploitation period for each type of modern slavery (see Table 5 for estimated durations, derived from interviews with support workers and police officers). This provides an estimated unit cost of lost output.

Lost time

For time lost by child victims, non-working adults from EEA countries and all victims from non-EEA countries, the assumption is that all hours lost would be non-working hours. For these groups, the number of victims for each exploitation type are multiplied by the cost of a non-working day (24 multiplied by the £5.54 opportunity cost of a non-working hour¹²) and the number of days victims typically spend in victimisation (Table 5).

This calculation above should also be used to estimate the opportunity cost of a non-working day of EEA national adults. Additionally, for EEA nationals who may have been in employment, 17.55 hours a day could have been spent on rest and leisure activities (24 hours in the day with 6.45 worked hours subtracted). This should also be included as lost time. The non-working hours of a working day are multiplied by the £5.54 opportunity cost of a non-working hour. This can then be scaled up by the number of working days within their exploitation period.

Table 9 below shows the combined lost time and lost output unit costs as a result of modern slavery, by type. The high unit costs of lost time and output for domestic servitude reflect the particularly long perceived duration of this type of exploitation.

Table 9: Estimated unit costs of lost time and output by modern slavery type

Modern slavery type	Unit costs
Labour exploitation	£40,330
Sexual exploitation	£37,460
Domestic servitude	£98,890

It is possible that the costs of lost output could be overestimated, as there is evidence to suggest that often vulnerable people who are not in employment are targeted and recruited into modern slavery (Cockbain & Brayley-Morris, 2017; Cooper *et al.*, 2017).

It is also possible, however, that the costs of lost output are underestimated, as it is assumed that all victims from non-EEA countries would not be in employment in the UK. There may be some victims from non-EEA countries who were trafficked to the UK but had visas to work in the country or who were already working in England and Wales but were trafficked within the country.

3.2.4. Victim services

Victims of modern slavery are referred into the NRM, which operates throughout the UK to identify potential victims and enables them to access support. Support in England and Wales is provided by The Salvation Army and its subcontractors. Scotland has arrangements with

¹² Department for Transport (2017). This figure is used in transport appraisal to estimate the value of non-working travel time, including travel to and from work, by all modes of transport.

TARA (who support female victims of sexual exploitation) and Migrant Help (who support all other victims). In Northern Ireland the system is overseen and managed by the Community Safety Unit with the Ministry of Justice and contracts let to Migrant Help and Belfast and Lisburn Woman's Aid. To capture the burden on society, the costs of the mechanism as well as the cost of support are included.

National Referral Mechanism

The cost of the NRM is made up of costs to frontline workers, who refer victims, and caseworkers who make reasonable grounds and conclusive grounds decisions on whether the identified individual has been a victim of modern slavery.

Referrals generally come from UK Visas & Immigration (UKVI), police, local authority workers or non-governmental organisations (NGOs). Forms take around 2 hours to complete. Using data on the proportion of forms completed by each type of worker and the hourly cost of each worker, it is estimated that the total cost of referring the 4,072 potential victims during financial year 2016/17 was around £200,000.

UKVI completes casework for potential victims from non-EEA countries, and the Modern Slavery and Human Trafficking Unit (MSHTU) completes casework for potential victims from EEA countries. This requires full-time workers to manage the volume of cases that are referred each year. The cost of the employment of the workers in these units during financial year 2016/17 is estimated to be around £1.7 million, based on salaries and non-wage costs.

The total cost of the NRM was therefore around £1.9 million. The way in which the NRM works is undergoing reform at the time of this publication. This means that there will be some changes to the costs of this category in future years.

Cost of supporting adult victims

Both adults and children are referred to the NRM but the support that they receive is different. Adult victims are supported through the Victim Care Contract and children are supported by their local authority.¹³ Adult victims receive varying levels of support depending on their needs; some victims are accommodated and some just access outreach care from support workers. The cost of the Victim Care Contract for England and Wales during financial year 2016/17 was £14 million. This includes the support provided to those victims who were only exploited abroad, but as this cost falls to the UK it is included here as a cost to society. In Scotland, £706,000 of funding in total was provided during 2016/17 to TARA and Migrant Help to support adult victims, while in Northern Ireland the Department for Justice provided £147,000 for adult victim support.

Cost of supporting child victims

Children who have been a victim of modern slavery are supported by local authorities in England and Wales. Some are looked after but there are some who may live with relatives and access additional support from local authorities. Many child victims of modern slavery are asylum seekers so they would have been looked after by local authorities whether they had been a victim of modern slavery or not. For these reasons, it has not been possible to estimate

¹³ This is not the case in Northern Ireland, as child victims receive the care of Health and Social Care Trusts.

the cost to child services of supporting victims of modern slavery. This is because the proportion of child victims who are looked after is not known, and it cannot be known whether the victim still would have been looked after if they were not a victim of modern slavery.

In Northern Ireland, the Health and Social Care Trust in the area in which the child resides is responsible for their care. In Scotland, children's services plans are drawn up jointly by local authorities and health boards. Similar issues apply for Scotland and Northern Ireland, which mean that it is not possible to identify those children supported directly as a result of their status as victims of modern slavery.

The Modern Slavery Act 2015 mandated the introduction of a national Independent Child Trafficking Advocate (ICTA) service for all suspected child victims of trafficking. ICTAs are specialist caseworkers whose role is to advocate on behalf of the child, and to ensure the child's best interests are reflected in decisions about their support. After a year-long pilot from September 2014, the three early adopter sites of Greater Manchester, Hampshire and Wales were selected to roll out this service from January 2017 onwards, prior to eventual national rollout. The child trafficking prevention expenditure for financial year 2016/17 was £1.4 million, which was spent on guidance to the ICTAs, training and the ICTA service itself.

In Scotland, the Human Trafficking and Exploitation (Scotland) Act 2015 contained provisions to ensure that children who have been trafficked are appointed an Independent Child Trafficking Guardian, where there is no person in the UK who has parental rights or responsibilities in relation to the child. However, this has not yet commenced. In the meantime, the Scottish Guardianship Service supports child trafficking victims (though their remit goes wider than this). This service receives £300,000 funding per year.

In Northern Ireland, Section 21 of the Human Trafficking and Exploitation (Criminal Justice and Support for Victims) Act (Northern Ireland) 2015 provides for an Independent Guardian to be appointed for a child who is a victim, or a potential victim, of human trafficking, or who is deemed to be a separated child. The Independent Guardian Scheme for Northern Ireland commenced on 1 April 2018.

This report has also attempted to capture the cost to charities of supporting child victims of modern slavery. Some charities were not able to provide costs and others said it was not possible to work out the proportion of their time and money spent on victims of modern slavery. The NSPCC was able to advise that their Child Trafficking Advice Centre (CTAC) cost £325,000, The Children's Society advised that they spent £60,000 during financial year 2016/17 on activities related to modern slavery, and Every Child Protected Against Trafficking UK's 2016/17 Annual Report (ECPAT, 2017) states that they spent £386,000 on child exploitation activities.

The total cost of modern slavery victim services is therefore around £19 million (Table 10), although this is very likely to underestimate the true cost, given the incomplete information available from charities and victim support. As victims of more severe cases of exploitation typically require more intensive and longer-term support, the cost estimate is split between the types of modern slavery based on the relative physical and emotional harm that is suffered by victims, as identified above.

Table 10: Estimated total cost of victim services

Modern slavery type	Total
Labour exploitation	£8,383,590
Sexual exploitation	£7,921,050
Domestic servitude	£2,653,620
Total	£18,958,270

3.3. Costs in response to modern slavery

3.3.1. Law enforcement costs

Internal analysis by OSCT in the Home Office estimates that the total expenditure to counter modern slavery by law enforcement agencies across government was approximately £83.5 million in England and Wales in the 2015/16 financial year. The majority of this expenditure is by the police, but it also includes estimates for the National Crime Agency and Regional Organised Crime Units and a number of government departments, such as the Home Office. This figure was uprated by inflation to financial year 2016/17 prices, and then scaled by recorded modern slavery, human trafficking, and exploitation offences in Scotland and Northern Ireland in financial year 2016/17 (HM Government, 2017). As shown in Table 11, 4% of modern slavery offences in the UK in financial year 2016/17 occurred outside England and Wales, which means the scaling factor is given by $1/0.96 = 1.042$. This gave a total expenditure estimate for the UK in financial year 2016/17 of £88.9 million.

Table 11: Police recorded offences of modern slavery in the UK, by country

	Offences	Proportion
England and Wales	2,255	96%
Scotland	60	3%
Northern Ireland	35	1%
UK	2,350	100%

The total law enforcement cost estimate is split between the types of modern slavery based on the relative number of suspected victims (Table 12, Table). However, the estimated unit cost remains the same across the different types of modern slavery as there is a lack of information to distinguish the law enforcement costs of the different types, and operations may uncover multiple forms of criminality.

Table 12: Estimated total law enforcement cost per modern slavery type

Modern slavery type	Law enforcement costs
Labour exploitation	£40m
Sexual exploitation	£37m
Domestic servitude	£12m

3.3.2. Other law enforcement costs

On 30 April 2017, the Gangmasters Licensing Authority (GLA) transitioned to the Gangmasters and Labour Abuse Authority (GLAA), introducing specially trained officers, known as labour abuse prevention officers (LAPOs), who were given powers under the Police and Criminal Evidence Act 1984 to investigate labour market offences in England and Wales, including offences under Parts 1 and 2 of the Modern Slavery Act 2015. LAPOs can also apply for slavery and trafficking prevention orders, and slavery and trafficking risk orders. Even before this, during 2016/17, the GLA would have been conducting investigations into trafficking, yet costs have not been included as it is not possible to separate out their work on modern slavery specifically from the broader range of work they have done to tackle labour exploitation.

3.4. Summary

The unit costs for each type of modern slavery are shown in Table 13. For costs in anticipation, costs of victims' services and law enforcement costs, due to their top-down cost estimation approach, the total costs generated above are divided by the midpoint of the estimate of total victims (11,500) to provide a unit cost. The physical and emotional harms to victims represent by far the biggest component of the unit cost.

Domestic servitude is the exploitation type with the highest estimated unit costs. The long duration of this form of exploitation, as perceived by interviewees, results in higher associated physical and emotional harms and lost time and output (relative to other types of modern slavery).

Table 13: Estimated unit costs of modern slavery by category

Unit costs	Anticipation	Physical and emotional harm	Lost output and time	Health services	Victim services	Law enforcement costs	Total
Labour exploitation	£210	£268,450	£40,330	£470	£1,630	£7,730	£318,810
Sexual exploitation	£210	£270,890	£37,460	£1,560	£1,650	£7,730	£319,500
Domestic servitude	£210	£281,150	£98,890	£390	£1,710	£7,730	£390,080
Average (mean)	£210	£271,190	£47,040	£910	£1,650	£7,730	£328,720

The unit costs for modern slavery can be 'scaled up' to estimate costs for all suspected victims, as measured by NRM referrals in financial year 2016/17 with a positive or pending conclusive grounds decision (excluding those who were exploited abroad only, see Table), or for total victims, as estimated by means of MSE. The costs to suspected victims are displayed in Table 14. Here, the total costs for known victims of domestic servitude are lower than for other types of exploitation due to the lower number of suspected victims. The total cost to suspected victims is highest for labour exploitation because of the higher number of suspected victims.

Table 14: Total costs of suspected victims of modern slavery by category

Total costs	Anticipation	Physical and emotional harm	Lost output and time	Health services	Victim services	Law enforcement costs	Suspected victims
Labour exploitation	£0.14m	£181.2m	£27.2m	£2.4m	£8.4m	£39.7m	£259.1m
Sexual exploitation	£0.13m	£171.2m	£23.7m	£7.5m	£7.9m	£37.2m	£247.6m
Domestic servitude	£0.04m	£57.4m	£20.2m	£0.6m	£2.7m	£12.0m	£92.8m
Total	£0.31m	£409.8m	£71.1m	£10.5m	£19.0m	£88.9m	£599.5m

Some of the cost categories do not apply to unknown victims, so for estimating the overall costs to society of modern slavery, the health and victims services and law enforcement costs are only scaled up for suspected victims and no further. When scaling up further to the estimates of all victims (where applicable), the estimated total costs are between £3.3 billion and £4.3 billion.

4. Conclusion

This report has attempted to apply the methodology underpinning the ‘Economic and Social Costs of Crime’ (Heeks *et al.*, 2018) to the offence of modern slavery. Although the basic approach to costing is the same, the methodology has been adapted for the purposes of estimating the costs of modern slavery. Key differences include the need to supplement the Crime Survey information on physical and emotional harms with interviews with police officers and support providers about other physical and emotional harms associated with modern slavery, and the need to choose a method for dealing with the combined harms of overlapping injuries. Due to these differences, comparisons to the unit costs of other crime types should be treated with caution. Nevertheless, the unit cost of modern slavery (£328,720) is higher than the unit costs for any crime type in ‘The Economic and Social Costs of Crime’, except for homicide (£3.2 million). Apart from homicide, the next highest unit cost in ‘The Economic and Social Costs of Crime’ is for rape (£39,360) but, as shown by interviews with support providers and police officers, victims of sexual exploitation in particular can experience a high number of rapes during their period of exploitation.

4.1. Limitations

The estimate of the costs of modern slavery is heavily reliant on information about perceived typical cases gained from interviews with police officers and support providers. While these interviewees will have experience of a range of cases of modern slavery as a result of their roles, only a sample of police forces and support providers were interviewed and there is a risk of selection bias in the sample if those organisations that responded are not representative of all services working with victims of modern slavery. There is also a risk of perception bias, as interviewees were asked to estimate harms and durations of typical cases of the different types of modern slavery and therefore these estimates could be skewed by memorable or recent cases that the interviewees were aware of.

The information gathered from these interviews is used to produce a unit cost that is then scaled up to estimate an overall cost to society. This relies on the assumption that the physical and emotional harms experienced from incidents of violence with injury and sexual offences are the same as the injuries occurred by known victims also apply to unknown victims, not in contact with support providers or the police.

Other data used in the estimate comes from the CSEW, where the injuries associated with violent and sexual crimes are applied to the number of those offences experienced during modern slavery. The key assumption here is that the nature of the violent and sexual offences experienced in modern slavery is equivalent to those experienced by the general household population, as captured by the Crime Survey.

There are also several gaps in the estimate, which suggest that it is an underestimate of the true extent of the economic and social costs of modern slavery. The QALY approach used to

estimate the physical and emotional harms of modern slavery focuses on health-related impacts on quality of life. They cannot currently capture other important areas of quality of life that would be expected to be impacted by modern slavery, such as freedom, autonomy and relationships. In addition, there are some specific costs that have not been possible to capture: court, prison and probation costs, and the costs of supporting child victims by local authorities.

4.2. Policy implications

Costing of crime types is useful to inform priorities for action and to better understand the value of prevention activity. The fact that the unit cost of crimes of modern slavery is second only to homicide justifies treating this crime type as a priority due to this high level of harm to society. The high unit cost also demonstrates the potential benefit from preventing this crime type and can be used to make the case for more 'upstream' preventative activity such as public awareness campaigns in countries of origin for victims, or providing training or risk assessment tools for frontline staff to identify potential victims entering the UK. However, the evidence for the effectiveness for such activity is currently lacking so there is a need for further research, particularly evaluation of prevention work.

Interventions to prevent modern slavery occurring in the first place are likely to be particularly cost-beneficial, but the cost associated with the long duration of exploitation implies that identifying existing, ongoing exploitation as early as possible could also effectively reduce harm. Potential interventions to facilitate early identification include public awareness campaigns so that the UK public can play a role in identifying potential victims of modern slavery, and alerting authorities as well as training frontline workers to spot the signs.

This work to estimate the cost of modern slavery has also revealed the wide range of physical and emotional harms suffered by victims. This emphasises the importance of the period of 'rest and recovery' offered by the NRM and the requirement for support providers to deal with a wide range of victims' needs, particularly mental health needs such as anxiety and depression.

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Appendix: Tables

Table A1: Total costs for all victims of modern slavery in the UK, by exploitation and cost type, 2016/17¹⁴

Total victim costs	Anticipation	Physical and emotional harm		Lost output and time		Health services	Victim services	Law enforcement costs	Total	
		Low	High	Low	High				Low	High
Labour exploitation	£1.1m	£1,199m	£1,559m	£180m	£234m	£2m	£8m	£40m	£1,431m	£1,845m
Sexual exploitation	£1.0m	£1,133m	£1,473m	£157m	£204m	£7m	£8m	£37m	£1,343m	£1,730m
Domestic servitude	£0.3m	£380m	£493m	£134m	£174m	£1m	£3m	£12m	£529m	£683m
Total	£2.4m	£2,712m	£3,525m	£470m	£611m	£10m	£19m	£89m	£3,303m	£4,258m

Table A2: Summary of current human trafficking and slavery offences in England, Wales, Northern Ireland and Scotland

England and Wales	<p>The Modern Slavery Act 2015¹⁵ consolidated existing slavery and trafficking offences into two offences:</p> <ul style="list-style-type: none"> Human Trafficking, defined as “arranging or facilitating the travel of another person with a view to exploitation”. Travel includes within a country, not just across international borders. Slavery, servitude and forced or compulsory labour – the Act states that this offence has the ‘same meaning’ as for the purposes of Article 4 of the European Convention on Human Rights.¹⁶
Northern Ireland	<p>The Human Trafficking and Exploitation (Criminal Justice and Support for Victims) Act (Northern Ireland) 2015¹⁷ consolidated existing offences into two offences:</p> <ul style="list-style-type: none"> Human Trafficking, defined as “arranging or facilitating the travel of another person with a view to that person being exploited”. Arranging or facilitating travel includes recruiting, transporting, transferring, harbouring, receiving, exchanging control over a

¹⁴ These costings represent the total cost estimate for all victims, as estimated by means of ‘multiple systems estimation’ (MSE) (Home Office, 2014). The ranges represent the uncertainty associated with the estimate of total victims, which is between 10,000 and 13,000. Ranges are not given when the cost estimates apply to suspected victims only.

¹⁵ National Archives (2015) Modern Slavery Act 2015. Available: <http://www.legislation.gov.uk/ukpga/2015/30/contents>

¹⁶ Article 4 of the Convention – Prohibition of slavery and forced labour

“1. No one shall be held in slavery or servitude.

2. No one shall be required to perform forced or compulsory labour.

3. For the purpose of this article the term ‘forced or compulsory labour’ shall not include:

(a) any work required to be done in the ordinary course of detention imposed according to the provisions of Article 5 of [the] Convention or during conditional release from such detention;

(b) any service of a military character or, in case of conscientious objectors in countries where they are recognised, service exacted instead of compulsory military service;

(c) any service exacted in case of an emergency or calamity threatening the life or well-being of the community;

(d) any work or service which forms part of normal civic obligations.”

¹⁷ National Archives (2015) Human Trafficking and Exploitation (Criminal Justice and Support for Victims) Act (Northern Ireland) 2015. Available: <http://www.legislation.gov.uk/nia/2015/2/contents>.

	<p>person.</p> <ul style="list-style-type: none"> Slavery, servitude and forced or compulsory labour – the Act places a statutory duty on the courts to interpret this offence in line with Article 4 of the European Convention on Human Rights.
Scotland	<p>The Human Trafficking and Exploitation Act (Scotland) 2015¹⁸ consolidated existing offences into two new offences:</p> <ul style="list-style-type: none"> Human Trafficking. There are two parts to the offence: the relevant action and an intention to exploit or knowledge of likely exploitation. The relevant action includes recruiting, transporting, transferring, harbouring, receiving, exchanging control over a person (or arranging facilitating these actions). Slavery, servitude and forced and compulsory labour – the Act states this offence is to be construed in accordance with Article 4 of European Convention on Human Rights.

Table A3: Interviews with support providers, by organisation

Organisation	Number of interviews
Ashiana	2 individuals
Bawso	3 individuals
BCHA	1 individual
Black Country	1 group and 1 individual
City Hearts	5 individuals
Medaille Trust	1 individual
Palm Cove	1 group
Unseen	1 group

¹⁸ National Archives (2015) Human Trafficking and Exploitation Act (Scotland) 2015. Available: <http://www.legislation.gov.uk/asp/2015/12/enacted>

Table A4: Descriptive data on the estimated durations, number of violent and sexual incidents and the likelihood of other harms experienced in typical cases of modern slavery, as perceived by interviewees, by exploitation type.

	Labour exploitation				Sexual exploitation				Domestic servitude			
Information gained from the interviews	High	Low	Mean	Median	High	Low	Mean	Median	High	Low	Mean	Median
	Months											
Length of exploitation period (months)	30.0	2.3	12.9	9.0	36.0	4.5	13.4	9.0	60.0	6.0	22.5	24.0
	Number of offences											
Number of violence with injury offences	130.0	0.0	26.8	0.8	407.1	0.1	79.0	34.3	260.0	0.0	65.0	11.3
Number of rape offences	0.6	0.0	0.1	0.0	4562.5	0.7	893.5	387.8	48.0	0.0	7.8	0.8
Number of other sexual offences	0.9	0.0	0.1	0.0	4562.5	136.9	913.3	407.1	260.0	0.0	36.0	0.8
	Percentage likelihood of harm											
Likelihood of malnutrition	100%	8%	64%	100%	100%	10%	85%	100%	100%	25%	75%	88%
Likelihood of back pain	100%	8%	67%	75%	75%	100%	88%	88%	100%	75%	84%	75%
Likelihood of a drug addiction	13%	0%	6%	5%	10%	0%	5%	5%	10%	0%	3%	1%
Likelihood of an alcohol dependency	100%	0%	35%	28%	10%	0%	6%	5%	50%	0%	13%	5%
Likelihood of fear and anxiety	100%	42%	88%	100%	100%	100%	100%	100%	100%	75%	95%	100%
Likelihood of depression	100%	42%	87%	100%	100%	100%	100%	100%	100%	75%	95%	100%
Likelihood of contracting an STI	N/A	N/A	N/A	N/A	100%	0%	45%	50%	25%	0%	9%	5%
Likelihood of becoming pregnant	N/A	N/A	N/A	N/A	85%	23%	55%	63%	25%	0%	6%	0%
Likelihood of having an abortion or termination	N/A	N/A	N/A	N/A	60%	0%	24%	25%	5%	0%	1%	0%

Table A5: Prevalence of injuries as a result of crime types¹⁹

Injury	Violence with injury	Rape	Other sexual offences
Minor bruising	59%	23%	2%
Severe bruising	28%	4%	2%
Scratches	21%	8%	2%
Cuts	27%	18%	0.5%
Stabbed	4%	0%	0%
Broken bones	6%	0%	2%
Nose bleed	7%	0%	0.2%
Broken nose	2%	0%	0%
Lost teeth	2%	0%	0%
Chipped teeth	2%	0%	0%
Dislocation	2%	0%	0%
Concussion	2%	4%	0.2%
Internal injury	1%	0%	0%
Facial injury	1%	3%	0%
Eye injury	0.3%	0%	0%
Other	8%	0%	0.1%

Table A6: QALY losses associated with physical and emotional harms

Injury	Corresponding Global Burden of Disease (GBD) ²⁰ injury	QALY loss
Physical		
Minor bruising or black eye	0.25 of broken bones (Dolan <i>et al.</i> , 2005)	2.6%
Severe bruising	0.5 of broken bones (Dolan <i>et al.</i> , 2005)	5.2%
Scratches	0.25 of cuts (Dolan <i>et al.</i> , 2005)	0.2%
Cuts	Open wound: short term, with or without treatment	0.6%
Puncture or stab wounds	No associated injury in GBD. Broken bones used as an appropriate proxy	10.3%
Broken/cracked/fractured bones	Fracture of sternum or one or two ribs: short term, with or without treatment	10.3%
Nose bleed	Open wound: short term, with or without treatment	0.6%
Broken nose	Fracture of face bone: short or long term, with or without treatment	6.7%

¹⁹ Source: *Analysis of Crime Survey for England and Wales 2015/16*, taken from Heeks *et al.* (2018)

²⁰ Salomon, J. A. *et al.* (2015) 'Disability weights for the Global Burden of Disease 2013 study', *The Lancet Global Health*, vol. 3(11), pp. 712-723.

Injury	Corresponding Global Burden of Disease (GBD) ²⁰ injury	QALY loss
Broken/lost teeth	0.5 of fracture of face bone: short or long term, with or without treatment (Dolan <i>et al.</i> , 2005)	3.4%
Chipped teeth	0.5 of broken/lost teeth (Dolan <i>et al.</i> , 2005)	1.7%
Dislocation of joints	Dislocation of shoulder: long term, with or without treatment	6.2%
Concussion or loss of consciousness	0.5 of disability weight for intracranial injury (short term) (Dolan <i>et al.</i> , 2005)	11.0%
Internal injuries	No associated injury in GBD. Severed bruising taken as an appropriate proxy	5.2%
Facial/head injuries	No associated injury in GBD. Cuts taken as an appropriate proxy	0.6%
Eye/facial injuries	Injury to eyes: short term	5.4%
Back pain	Low back pain - Moderate	5.4%
Severe wasting	Severe wasting (Dolan <i>et al.</i> , 2005)	12.8%
Miscarriage	Miscarriage (Dolan <i>et al.</i> , 2005)	71.0%
HIV	HIV diagnosis (Dolan <i>et al.</i> , 2005)	13.6%
Gonorrhoea	Gonorrhoea (Dolan <i>et al.</i> , 2005)	1.0%
Chlamydia	Chlamydia (Dolan <i>et al.</i> , 2005)	1.0%
Trichomoniasis	Trichomoniasis (Dolan <i>et al.</i> , 2005)	1.0%
Bacterial Vaginosis	Bacterial Vaginosis(Dolan <i>et al.</i> , 2005)	1.0%
Other	Other injuries of muscle and tendon (includes sprains, strains and dislocations other than shoulder, knee or hip)	0.8%
Emotional		
Fear	Anxiety disorders: mild (Ohman, 2008) ²¹	3.0%
Depression	Major depressive disorder: moderate episode	39.6%
Anxiety/Panic Attacks	Anxiety disorders: moderate	13.3%
Drug dependency	Moderate cocaine dependence	47.9%
Alcohol dependency	Moderate alcohol use disorder	37.3%

²¹ Ohman, A. (2008) 'Fear and Anxiety' in Lewis, M., Haviland-Jones, J. and Barrett, L. (Eds.) *The handbook of emotions* (pp. 709-729). New York, NY: The Guilford Press.

Table A7: Duration of consequences associated with physical and emotional harms

Injury	Duration (years)	Source
Physical		
Minor bruising or black eye	0.0288	Dolan <i>et al.</i> (2005)
Severe bruising	0.0575	Dolan <i>et al.</i> (2005)
Scratches	0.006	Dolan <i>et al.</i> (2005)
Cuts	0.024	Dolan <i>et al.</i> (2005)
Puncture or stab wounds	0.0575	3 weeks (Advanced Tissue, 2014) ²²
Broken/cracked/fractured bones	0.115	Dolan <i>et al.</i> (2005)
Nose bleed	0.0027	No source available, assumed 1 day
Broken nose	0.059	Dolan <i>et al.</i> (2005)
Broken/lost teeth	0.0192	Dolan <i>et al.</i> (2005)
Chipped teeth	0.0192	Dolan <i>et al.</i> (2005)
Dislocation of joints	0.154	8 weeks (Drukin <i>et al.</i> , 2008) ²³
Concussion or loss of consciousness	0.0335	Dolan <i>et al.</i> (2005)
Internal injuries	0.0575	No source available, assumed the same as severe bruising
Facial/head injuries	0.024	No source available, assumed the same as cuts
Eye/facial injuries	0.0192	1 week – traumatic iritis (Root, 2010) ²⁴
Moderate low back pain	0.23077	12 weeks - National Institute of Neurological Disorders and Stroke (2017) ²⁵
Severe wasting	0.375	3-6 months – National Health Service (2017) ²⁶
Miscarriage	0.0192	Dolan <i>et al.</i> (2005)
HIV	30	Dolan <i>et al.</i> (2005)
Gonorrhoea	0.0192	Dolan <i>et al.</i> (2005)
Chlamydia	0.0192	Dolan <i>et al.</i> (2005)
Trichomoniasis	0.0192	Dolan <i>et al.</i> (2005)
Bacterial Vaginosis	0.0192	Dolan <i>et al.</i> (2005)
Other	0.0192	Dolan <i>et al.</i> (2005)
Emotional		

²² Advanced Tissue (2014) 'The signs and stages of wound healing'. Available from: <http://www.advancedtissue.com/signs-wound-healing-stages/>

²³ Drukin, R., Burkhalter, W. and King, J. (2008) *A guide to dislocated shoulder*, HBO & Company, Honolulu, Hawaii. Available from: <https://www.hawaiiipacifichealth.org/media/1299/pediatric-orthopedics-dislocated-shoulder.pdf>

²⁴ Root, T. (2010) *Eye Trauma*, Timroot.com. Available from: <http://www.opthobook.com/pdfvault/08-eyetrauma.pdf>

²⁵ National Institute of Neurological Disorders and Stroke (2017) *Low Back Pain Fact Sheet*. Available from: <https://www.ninds.nih.gov/Disorders/Patient-Caregiver-Education/Fact-Sheets/Low-Back-Pain-Fact-Sheet>

²⁶ National Health Service. (2017) *Malnutrition*. Available from: <https://www.nhs.uk/conditions/malnutrition/>

Injury	Duration (years)	Source
Fear	1.25	Norris & Kaniasty (1994) show that fear from crime is still evident after 15 months ²⁷
Depression	5	Dolan <i>et al.</i> (2005)
Anxiety / panic attacks	3	Dolan <i>et al.</i> (2005)
Drug dependency	5	Dolan <i>et al.</i> (2005)
Alcohol dependency	5	Dolan <i>et al.</i> (2005)

Table A8: Average 2016/17 costs of healthcare associated with physical injuries

Injury	Unit cost of medical requirement
Broken bones	£2,580
Severe bruising	£360
Stabbed	£870
Internal injury	-
Broken nose	£1,290
Cuts	£320
Dislocation	£350
Concussion	£740
Lost teeth	£240
Chipped teeth	£150
Scratches	-
Minor bruising	-
Facial injury	£320
Eye injury	-
Nose bleed	-
Other	£400
Fear	£100
Depression	£1,040
Anxiety / panic attacks	£1,300
Drug abuse	£2,610
Alcohol abuse	£2,610
Sexual dysfunction	£100
Low back pain	£950

²⁷ Norris, F. H. and Kaniasty, K. (1994) 'Psychological distress following criminal victimization in the general population: Cross-sectional, longitudinal, and prospective analyses'. *Journal of Consulting and Clinical Psychology*, vol. 62(1) pp. 111-123.

Injury	Unit cost of medical requirement
HIV	£4,200
STI	£2,290
Miscarriage	£620
Labour/delivery	£2,840

Table A9: Number of suspected victims²⁸ exploited in the UK identified through the NRM (2016/17)

	Modern slavery type	EEA	Non-EEA
Adults	Labour exploitation	249	232
	Sexual exploitation	63	271
	Domestic servitude	13	160
Children	Labour exploitation	72	122
	Sexual exploitation	263	35
	Domestic servitude	2	29

²⁸ Includes victims with a positive conclusive grounds decision or pending a conclusive grounds decision.

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