

Suicide and Attempted Suicide

JSNA August 2009



Westminster City Partnership

This document contributes to
Westminster's Joint Strategic Needs Assessment

EXECUTIVE SUMMARY	4
SUICIDE AND ATTEMPTED SUICIDE IN WESTMINSTER	10
Defining Suicide	10
Why is suicide an important issue in Westminster?	11
What is the focus of this needs assessment?	11
Suicide in Westminster, London and England.....	12
How do suicide rates in Westminster compare to other London boroughs?.....	15
What are the features of the people who attempt and commit suicide?	16
Who are the people that attempt and commit suicide in Westminster?	17
Population Groups and Suicide.....	17
Young Persons	17
Older Persons.....	19
<i>Students</i>	19
<i>Mental Health</i>	20
<i>Sexuality</i>	22
Homelessness.....	24
Substance misuse	25
Deliberate self-harm	27
Probation Service Clients.....	28
Other population groups	30
Summary	30
LOCAL ANALYSIS OF SUICIDE AND UNDETERMINED INJURY IN WESTMINSTER: 2005-2008.....	31
Age and Gender	32
Place of birth.....	34
Occupation	35
Place of death	37
Cause of death.....	38
External pressures and behavioural history	41
LOCAL ANALYSIS OF SELF-HARM AND ATTEMPTED SUICIDE IN WESTMINSTER	43
Accident and Emergency admissions for deliberate poisoning	44
.....	2

Royal National Lifeboat Institute (RNLI)	47
London Underground in Westminster	49
PREVENTING SUICIDE	53
General population or sub-population interventions	53
Interventions aimed at high risk groups.....	54
Interventions aimed at those who have attempted suicide or have suicidal ideation.....	54
Means restriction	54
Reviewing and improving services	55
Gaps in services.....	55

Executive Summary

In 2002 the Government launched its national suicide prevention strategy aiming to reduce the death rate from suicide and undetermined injury by 20% by the year 2010.

In Westminster 24 years of life are lost per 10,000 population to suicide and undetermined injury each year; this compares with 22.71 in London as a whole. Although the current trend shows a decline, the suicide rate in Westminster is higher than in many London boroughs and is predicted to rise again due to the recent economic downturn.

Risk factors to suicide and attempted suicide:

In 2007 **male** suicides outnumbered female suicides by a ratio of 2:1 (this compares to a ratio of 3:1 observed nationally and in London).

High risk **age** groups tend to follow national trends. Male deaths peak between the ages of 25 and 44, whereas women peak between 35 and 54. However the proportion of deaths in Westminster's **older persons** is much higher than that observed nationally, particularly in women.

In Westminster no particular **nationality** appears more at risk than others.

In **young people** Childline identified family conflict including physical abuse, sexual abuse, school problems such as bullying, academic and behavioural problems, exclusion and, long-term truancy as causes of suicidal ideation. 80% of calls to Childline were from girls which is most likely to be explained by the stigma attached to suicidal ideation amongst boys.

Social isolation and the ease of method due to the access to drugs increase the risk of older people committing or attempting suicide. 65% of

Westminster's 85+ year olds live on their own. Retired persons accounted for 23% of deaths in Westminster.

Although students are not statistically more likely to commit suicide than other individuals of a similar age, Westminster has 84,000 **students** registered at its institutions.

It is reported that as many as 90% of people who commit suicide have at least one psychiatric disorder at the time of death. National indices suggest that there are 59% more inpatient admissions for **psychiatric disorders** in Westminster for severe and enduring mental illness than in the country as a whole.

Evidence suggests that **lesbian, gay and bisexual** (LGB) people are at greater risk of poor mental health, suicide, suicidal ideation and deliberate self harm, than heterosexual people. Whilst research into the aetiology of suicide in LGB populations is lacking, the increased risk of suicide attempts in this population may be attributable to the lifestyle and behavioural factors such as drug and alcohol misuse that are more prevalent in LGB persons than in heterosexuals, and also the increased likelihood of LGB people experiencing victimisation and discrimination relating to their sexual orientation.

Homelessness presents a particular challenge to Westminster, with historically very high numbers of homeless people compared to the rest of England. Such individuals include people leaving institutions such as local authority care, prison and the armed forces and victims of child abuse, many of whom have mental health and/or substance misuse problems and are therefore at higher risk of committing suicide.

38% of men and 16% of women aged 16-64 have an **alcohol** use disorder; within this 32% of men and 15% of women are thought to be hazardous/harmful drinkers. Westminster has relatively large **problem drug**

using population compared to the rest of the country; the odds of dying as a result of suicide in Westminster are 1 in 67 for those who abuse drugs compared to 1 in 84 who die from suicide in the general Westminster population.

Approximately 60% of persons who die as a result of suicide have a history of **self-harm**, with 25% of persons estimated to have previously been in contact with secondary care services as a result of their self-harm.

People **serving community sentences** are also likely to be at increased risk. The Probation Service estimates that approximately 1500-2000 individuals in Westminster are under probation supervision in any year.

In Westminster **senior professionals** such as company directors accounted for almost a quarter of suicides.

External pressures such as loneliness, isolation, divorce, unemployment and bereavement are some of the factors identified as associated with suicide in a local Westminster suicide audit, with **sudden bad news** or an **adverse event** identified in 50% of cases audited in 2006/07

A **previous suicide attempt** is the greatest risk factor for suicide.

Place:

Places of death recorded for Westminster residents included home, hospital, at tube stations or on the overground railway network, the River Thames or Grand Union Canal, hotels, or other residential addresses.

Cause:

In order of frequency, **cause of death in males** in Westminster are most likely to be hanging, jumping in front of a moving object, jumping from a height, poisoning and drowning or submersion. **For women** it is poisoning, jumping from a height, jumping in front of a moving object and hanging.

Recommendations on prevention:

A relatively small proportion of patients are directly referred to **mental health services** after an admission for suspected deliberate poisoning, 41% of patients are referred onward to another speciality (including mental health and alcohol specialities).

The London Ambulance Service will attend incidents where called and if necessary take individuals to hospital for treatment. Consideration should be given to what happens when individuals are not taken to hospital.

As a voluntary life saving organisation, the **RNLI** have no jurisdiction to detain people who have jumped from a bridge, whilst police officers might attend incidents, there again is little consistency in what happens to individuals after an attempted suicide, with no policies currently in place setting out where individuals should be taken for follow up or signposted to for help.

Westminster and Waterloo Bridges may be considered as 'hotspots'; these locations should be considered in the suicide prevention strategy for targeted prevention interventions

Within **Westminster, Green Park, Embankment, Oxford Circus** and **Victoria** may be considered as 'hotspots'; these locations should be considered in the suicide prevention strategy for targeted prevention interventions

One area where possibly more **mental health promotion** is needed is amongst young men with depression

It has been suggested that the best solutions are those that are low cost, whole population, ones or those that will also benefit the whole group at risk, for example wider access to psychological therapies for people with depression.

There is strong evidence that **restricting access to the means** for committing suicide is effective in reducing suicides – this is because the level of suicide intent varies over time and deterring suicide when intent is at its highest may deter suicide whilst the level of intent reduces. Such as medicine management and doors on underground stations.

Barriers to better suicide prevention:

- Collaboration and information sharing with the Probation Service may help enhance suicide prevention.
- Regular suicide audits of coroner's files to supplement the limited data provided in the Public Health Mortality Files will lead to a better understanding of the relationship between ethnicity and suicide in Westminster.
- A more detailed analysis of individual cases using coroner's case files may provide more information surrounding the employment status of individuals who commit suicide in Westminster.
- Many acts of deliberate self harm will occur at home and unless they require hospitalisation they will go unreported. Even if hospital treatment is required, identification of these persons is difficult from hospital administration systems. Without interrogation of individual patient records it is also difficult to determine the degree of intent and distinguish between minor injuries often inflicted as a 'coping mechanism' and more serious suicidal ideation

- No clear protocol concerning which hospital ambulances take individuals to therefore difficult to map precisely what follow up and level of care individuals receive after an attempted suicide or episode of suicidal ideation.

Recommendations to improve support to those at risk of suicide:

Risk group	Gap in service
1. Those in contact with mental health services or A & E	<ul style="list-style-type: none"> • support and “holding” arrangements whilst people are awaiting assessment or treatment • a pathway into deliberate self harm services • the volume of borderline personality disorder services.
2. Those in contact with primary care	<ul style="list-style-type: none"> • depression screening • screening for those with depression • The volume of psychological therapy services.
3. Those in contact with other services for “at risk” groups e.g. substance misuse, homelessness, offender management, counselling, help lines	<ul style="list-style-type: none"> • awareness training for staff in these services on suicide risk and how to respond to it • signposting/referral guidance to staff in these services • gatekeeping arrangements to ensure appropriate referrals into mental health services • ability to support clients who are suicidal but are not eligible for treatment in mental health services and not registered with a GP.
4. Those who are not in contact with any services	<ul style="list-style-type: none"> • targeted mental health promotion for young men to encourage self referral • not all people who attempt suicide on railways and waterways are immediately taken for psycho-social assessment at A & E or psychiatric hospital • insufficient access to counselling and support for those bereaved by suicide or other sudden cause of death • advice/support to hotels on responding to potential suicides • links between prison service/ probation and mental health services • contact, support and activities for isolated older people suffering from depression • identifying people with depression and promoting good mental health

Suicide and Attempted Suicide in Westminster

Everyone has a right to life and a right to the longest and healthiest life possible. Many people who die by suicide are denied years of life as many suicides are preventable.

Suicide prevention is a national Government priority. In 2002 the Government launched its national suicide prevention strategy aiming to reduce the death rate from suicide and undetermined injury by 20% by the year 2010¹.

In response to this NHS Westminster is producing a suicide prevention strategy, building on the suicide audits that all primary care trusts are under duty to conduct on a regular basis.

Defining Suicide

‘Suicide is the result of an act deliberately initiated and performed by a person in the full knowledge or expectation of its fatal outcome.’

World Health Organisation, 20012

Suicide is an act of intentional self-harm, identified by the International Classification of Diseases Version-10 codes X60-X84³. In order for a verdict of suicide to be assigned, it must be proven beyond reasonable doubt that the act was intentional; however, given the lack of evidence to provide such a conclusion a verdict of undetermined injury may be given (ICD-10 codes Y10-Y34, excluding Y33.9).

Evidence suggests that many deaths coded as undetermined injury are in fact suicides and so ICD-10 codes X60-X64 and Y10-Y34 (excluding Y33.9) will be used in this analysis to identify deaths by suicide in Westminster, in line with the Office of National Statistics.

Why is suicide an important issue in Westminster?

Suicide is one of the main causes of death in people with mental illness and also one of the commonest causes of death in young men. In Westminster 24 years of life are lost per 10,000 population to suicide and undetermined injury each year (95% confidence interval 9.43-38.69, directly age-standardised); this compares with 22.71 (20.91-24.51) in London as a whole⁴.

Although declining, the suicide rate in Westminster is higher than in many London boroughs; this is likely to be associated with the diverse characteristics and some of the health problems in the Westminster population. For example, Westminster has a particularly high prevalence of severe and enduring mental illness as well as large homeless and problem drug using populations. Additionally, Westminster has a high proportion of older persons living alone and, therefore, at risk of social isolation.

Westminster is a bustling, high profile borough with a large number of people coming into the area each day for either work or leisure, expanding the population to approximately 1 million during the working week day. One of the consequences of this is that the number of non-residents attempting or committing suicide in Westminster, as a proportion of all suicides, is higher than the rest of England.

What is the focus of this needs assessment?

This needs assessment is part of a wider rolling programme of needs assessment, the Joint Strategic Needs Assessment (JSNA), undertaken jointly by Westminster City Council and NHS Westminster. The JSNA process seeks to ensure that needs assessment is embedded into the commissioning cycle, to make sure we are designing and commissioning effective services to meet the health and well-being needs of our community and reduce health inequalities.

In the development of a suicide prevention strategy it is important to first understand and describe the size of the problem and the population groups at risk locally. This needs assessment aims to:

- identify trends in suicide rates locally and compare these to what is happening in London and England
- describe factors associated with increased risk of suicide from the published literature, and identify and quantify at risk populations locally
- provide a descriptive overview of all persons (resident and non-resident) committing suicide in Westminster
- identify the means by which people are committing suicide and identify suicide 'hotspots' in the borough
- estimate the number of people attempting suicide in the borough and understand what happens after a failed suicide attempt and what services people are signposted to/engage with.

Suicide in Westminster, London and England

Suicide rates in men and women have been declining in recent years; in 2007 the lowest rates since 1993 were observed. Male suicide rates in England reached a peak in 1998 of 15.52 per 100,000; by 2007 this had fallen to 11.64 per 100,000, a reduction of 25%⁵.

Female suicide rates have been consistently lower than that observed in men. Female suicide rates in England peaked in 2000 at 4.6 per 100,000; in 2007 this had fallen to 3.43 per 100,000, a reduction of 25%.

Despite the downward trend in recent years there are concerns that there could be a reversal in this trend in the next few years given the recent economic downturn and subsequent recession; the highest rate of suicide in the twentieth century was in the early 1930s during the Great Depression.

In 2007 there were 4,006 suicides in England, three quarters of which were in men; a proportion that has remained constant since 1993.

The majority of suicides occur in men under the age of 50 with the highest rates in men aged between 30 and 50 years old. Among women the suicide rate is highest in 40-59 year olds.

Nationally the suicide rate in those persons aged 80 and over is proportionately higher than that for the population as a whole; 4.5% of the population is aged 80 and over whilst over 5.2% of the total deaths from suicide occurred in this aged group⁶.

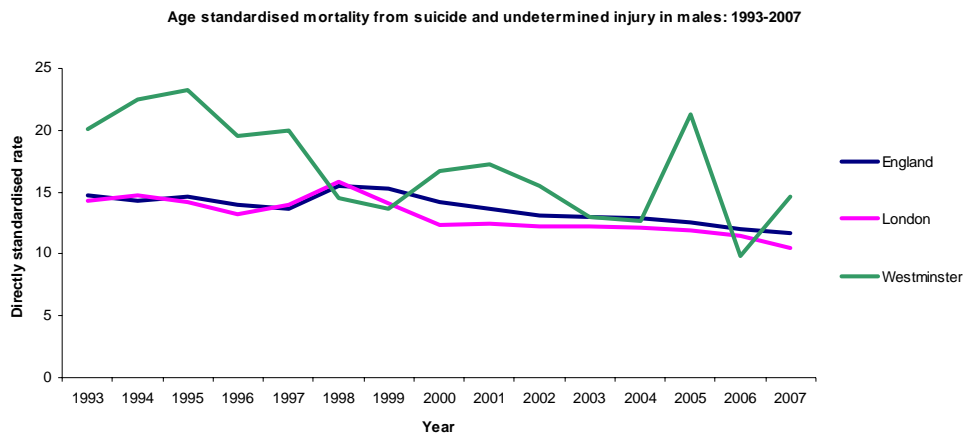
The trends that have been observed in England have also been observed in London; male and female suicide rates peaking in 1998 at 15.84 and 5.53 per 100,000 respectively, with a decline observed in recent years. In 2007 female suicide rates were slightly higher than in England at 3.5 per 100,000, whilst male suicide rates were lower than in England at 10.5 per 100,000.

Although suicide rates observed in Westminster over the last fifteen years show the same downward trend observed in London and in England, much greater fluctuation in year on year suicide rates has been observed; this, however, is attributable to the relatively small number of suicides that occur in Westminster each year and, therefore, one or two additional or fewer suicides has a greater effect on the overall rate than would be the case if numbers were larger.

As is the case nationally and in London, the majority of suicides in Westminster are in men; in 2007 male suicides outnumbered female suicides by a ratio of 2:1 (this compares to a ratio of 3:1 observed nationally and in London).

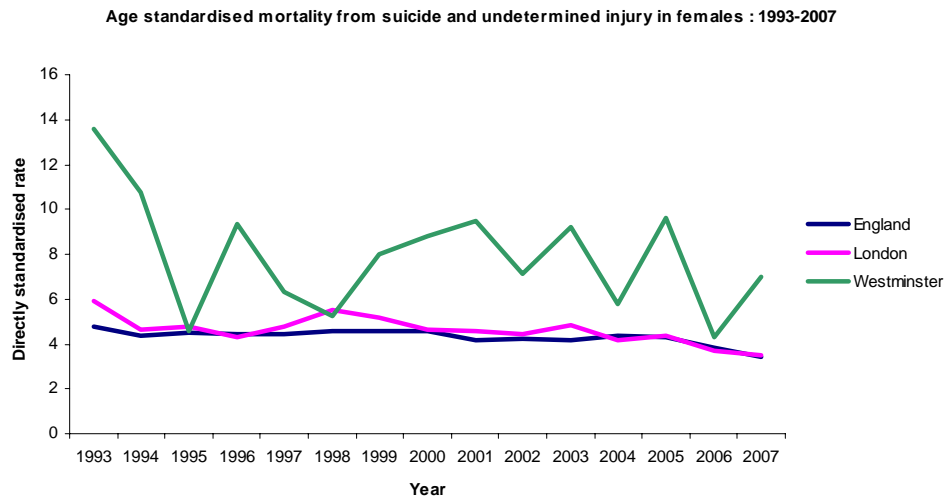
Despite declining mortality rates, the mortality from suicide in Westminster has consistently been higher than that in London and England over the last 15 years. In 2007 the suicide rate in males was 28% higher than that observed in London, whilst the rate in females was almost double that of London.

Age-standardised mortality from suicide and undetermined injury in males, 1993-2007



Compendium of Health and Clinical Indicators

Age-standardised mortality from suicide and undetermined injury in females, 1993-2007

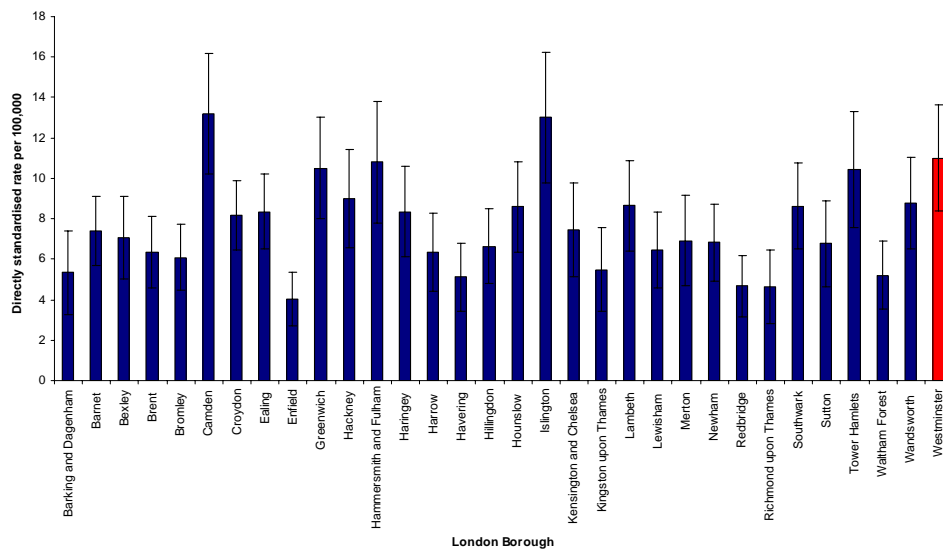


Compendium of Health and Clinical Indicators

How do suicide rates in Westminster compare to other London boroughs?

2005-07 pooled rates show that Westminster has the third highest suicide rate in London behind Camden and Islington⁷.

Age standardised suicide and undetermined injury rates per 100,000, London 2005-07 (pooled)



* City of London data has been excluded due to small numbers

Compendium of Health and Clinical Indicators

Between 2005 and 2007 men accounted for 69% of suicides and undetermined injury in Westminster, one of the lowest proportions in London (range = 63% in Hammersmith & Fulham to 89% in Redbridge).

What are the features of the people who attempt and commit suicide?

The association of mental illness and thoughts of hopelessness and depression with suicide have long been established; however, in recent years the risks associated with acute traumatic events and other risk factors have been described. Risk factors include:

- a recent bereavement or loss
- a recent breakdown of a relationship
- a recent major disappointment such as failing exams
- a major change in circumstances
- a chronic physical illness
- social isolation
- a mental health problem
- a substance misuse problem
- a history of deliberate self-harm
- a previous suicide attempt
- loss of a close friend or relative to suicide.

For many people no one risk factor causes a person to attempt or commit suicide and it is likely that in most people a combination of factors contribute to the decision to commit suicide.

The risk factors and events that precipitate suicidal incidents are similar in men and women; however, traditionally men are much less likely to discuss their feelings and access health services, in comparison to women who are more inclined to seek psychiatric help and often have strong social networks to provide support.

Who are the people that attempt and commit suicide in Westminster?

Although declining, the suicide rate in Westminster is higher than in many London boroughs; this is likely to be associated with the diverse characteristics and some of the health problems in the local population.

Based on the known risk factors for suicide and the identified at risk populations from published literature, the number and characteristics of populations at risk of suicide in Westminster can be described with a view to informing the targeting of appropriate preventative initiatives.

Population Groups and Suicide

Young Persons

National statistics and local suicide audits suggest that suicide is relatively rare in young persons, particularly those under the age of 15 years. It has, however, been argued that the prevalence of suicide in young persons is underestimated because of the reluctance of coroners to classify such deaths as deliberate acts of self-harm; these deaths will, therefore, be classified as open verdicts⁸. For every suicide among 10-14 year olds there are three deaths classified as undetermined or accidental drug overdoses⁹.

In addition to the Office of National Statistics data potentially underestimating the extent of suicide in young persons and adolescents, limited data is available describing the number of young persons experiencing suicidal ideation or attempting suicide.

Research suggests that between 7 and 14% of adolescents (aged 13-19) self-harm before the age of 19¹⁰. The proportion of people attempting suicide after deliberately self-harming is estimated to be between 0.24% and 4.3%; this is equivalent to between 23 and 414 adolescents in Westminster.

Analyses of calls made to Childline corroborate published opinion regarding the significance of suicide in young persons in England. In 2005/06, 1.4% of all answered calls to Childline involved a discussion of suicide; 1,265 were received where the young person wanted to talk specifically about suicide, with a further 2,108 calls where the young person called about another issue but also mentioned suicide¹¹.

It is important to note that the Childline calls are likely to represent just the tip of the ice-berg, with only 40% of all Childline calls answered and many more young persons are either seeking help from alternative sources, or are not accessing any form of help at all.

Girls accounted for 80% of all calls where the main issue was suicide; whilst this is unlikely to be representative of the differences in the gender of young persons contemplating suicide, it may be indicative of the stigma associated with discussing suicidal feelings and reflect the fact that young men are less likely to access help.

Calls were predominantly from young people aged 12 and over; children under 12 accounted for 5% of all calls compared with 23% of the total calls answered by Childline.

In addition to their helpline, Childline also offers a text service; in 2006 7,324 automated texts relating to the issue of suicide were sent, representing 7.3% of all automated texts. Due to the anonymity associated with text messages, the age and gender profile of users cannot be determined.

The main reasons cited by Childline callers for suicidal ideation include:

- Family conflict including physical abuse
- Sexual abuse
- School problems such as bullying, academic and behavioural problems

- Exclusion
- Long-term truancy.

Older Persons

Published research suggests that suicide in older persons is strongly associated with social isolation, physical pain, hopelessness and depression, with very few of these people in contact with older persons psychiatry services¹². Westminster has one of the highest proportions of older persons living alone in England; according to the 2001 Census, one in two older residents lives alone in Westminster compared with one in four in England. The likelihood of an older person in Westminster living alone increases with age; 45% of those aged between 65 and 74 years living alone, compared with 64% of those aged 85 and over¹³.

The Office of National Statistics Psychiatric Morbidity Survey¹⁴ estimated that 10.2% of people aged 65-69 suffered from a common mental health problem^a and 0.3% from a psychotic disorder. In the 70-74 age group 9.4% were estimated to have a common mental health problem and 0.3% a psychotic disorder. Applying these rates to the Westminster population suggests that approximately 1,221 persons aged between 65 and 74 in Westminster had a common mental health problem or psychotic disorder.

Students

There is no evidence to suggest that students have a higher risk of suicide than non-students of the same age. However, with eleven universities and colleges based within Westminster and 84,000 students registered with these establishments, students remain an important group for targeting prevention interventions.

A study commissioned by POPYRUS¹⁵ describing suicide in further education, found that in two thirds of study cases a mental health problem had been

^a Common mental health problem including generalised anxiety disorder, mixed anxiety disorder, depressive episode, phobia, obsessive compulsive disorder and panic disorder.

diagnosed (usually during their time in further education); men in their early twenties appearing to be at highest risk, as is the case in the general population.

Times of change and adjustment appear to be particular at risk times for suicide among students; approximately three quarters of the suicides studied occurred during periods of so-called transition e.g. at the start and end of university semesters. This is a time when exams are undertaken, considerable change and adjustment occurs and possibly when not only the risk of social isolation is greatest (for example, when friends or housemates go travelling or return home for the holidays), but support services are less accessible or used.

Given the size of the student population in Westminster it can be anticipated that suicides may occur within this population in any given year; therefore, coordinated suicide prevention activity targeted at this population is logical.

Mental Health

Research suggests that the risk of suicide is raised for most mental health problems; it is reported that as many as 90% of people who commit suicide have at least one psychiatric disorder at the time of death¹⁶. This is equivalent to 15 Westminster residents each year who commit suicide.

Mental illness is more common in Westminster than elsewhere in England; national indices suggest that there are 59% more inpatient admissions for severe and enduring mental illness than in the country as a whole. An estimated 2,564 people in Westminster have a psychotic disorder¹⁷.

The risk of suicide varies for specific disorders, with depression and schizophrenia associated with the greatest risk; the more severe the depression the greater the risk of suicide, with those persons in a recovery

phase thought to be at particular high risk, regardless of the severity of depression.

Persons suffering from a bipolar disorder are up to 15 times more likely to commit suicide than the general population¹⁸ whilst schizophrenia is associated with a suicide risk 8.5 times that of the general population¹⁹. Based on local Public Health Mortality Files, this means that the odds of dying as a result of suicide in Westminster are 1 in 71 for those suffering from bipolar disorder (odds of dying from suicide in the Westminster population are 1 in 84) and 1 in 77 for persons with schizophrenia.

Approximately 1 in 10 people with psychosis commit suicide in the UK, many within the first five years of onset²⁰. Based on the estimated number of people expected to have psychosis in Westminster, it is estimated that 256 persons suffering from psychosis will commit suicide in Westminster.

Whilst the risk of suicide in persons with a history of psychosis is well established, the underlying aetiology of suicide in persons with psychosis is less well understood. There is, however, a growing body of evidence to suggest that the risk of suicide is greatest during non-psychotic depressive phases of illness²¹ and it is in fact an acute traumatic event or episode of depression that triggers the suicidal ideation and not necessarily the psychotic illness itself.

NICE²² estimate that between 60 and 70% of people with borderline personality disorder attempt suicide, with up to 10% completing suicide. This is equivalent to between 815 and 951 persons aged between 16 and 74 years in Westminster attempting suicide, with as many as 136 completing suicide.

Persons admitted to hospital as a result of their psychiatric condition appear to be particularly at risk of suicide, with the risk highest immediately before and after discharge. Approximately 40% of suicides in persons with a diagnosed

mental illness occur either during a psychiatric inpatient admission or soon after discharge, with risk highest in the first 2 weeks after discharge²³.

Appleby *et al*²⁴ suggest that the risk of suicide remains high even after individuals appear to be in recovery. Those individuals who committed suicide were more likely to have had changes made to their care packages as a result of perceived improvements in their conditions; changes included dose reductions in medication and decreased supervision, often at the request of the patient.

A significant proportion of suicides in patients that have had inpatient care are thought to be preventable if the required improvements to care and service provision are introduced²⁵.

The majority of individuals with mental health problems do not require inpatient care. NHS Westminster commissions psychological and counselling services in a primary care setting aimed at persons with mild and moderate mental health problems. All patients in receipt of this service undergo a risk assessment.

Between October 2008 and March 2009, 505 individuals' suicide risk was assessed. 73% of individuals were deemed to have no risk of suicide, however, some risk of suicide were identified in 27% of patients; 18% of all patients demonstrated a mild risk and a further 9% a moderate or severe risk.

Sexuality

Evidence suggests that lesbian, gay and bisexual (LGB) people are at greater risk of poor mental health, suicide, suicidal ideation and deliberate self harm, than heterosexual people^{26,27}. The risk of attempting suicide is at least twice as high in LGB people compared to heterosexuals, with gay and bisexual men up to four times more likely to attempt suicide than heterosexual persons²⁸.

Whilst research into the aetiology of suicide in LGB populations is lacking, the increased risk of suicide attempts in this population may be attributable to the lifestyle and behavioural factors such as drug and alcohol misuse that are more prevalent in LGB persons than in heterosexuals, and also the increased likelihood of LBG people experiencing victimisation and discrimination relating to their sexual orientation²⁹.

An estimated 10,000 lesbian, gay, bisexual and transgender adults (aged 15 and over) live in Westminster³⁰ representing approximately 5% of the population. In reality, however, it is likely that the actual number is much higher. Additionally, there are likely to be significant numbers of LGBT people working or visiting the borough on a regular basis.

In their Westminster Needs Analysis, GALOP, the LGBT community safety charity, found that 3% of gay and bisexual men had attempted suicide in the last 5 years, whilst 19% had considered suicide. This is equivalent to 169 men in Westminster having attempted suicide on at least one occasion in the last five years, with 1,072 men admitting to considering suicide.

Stonewall, an equality and justice organisation for LGB estimated that 5% of lesbian and bisexual women in England had attempted suicide in the last year (7% in Westminster)³¹. Applying the national prevalence of suicide attempts to the Westminster population, this suggests approximately 200 LGB women in Westminster had attempted suicide in the last year (the 7% Westminster specific figure was based on a small sample size of 29, thus the national prevalence of 5%, based on a sample of more than 6,000 was deemed more accurate).

The results of the GALOP and Stonewall surveys appear to contradict the published research which suggests that gay and bisexual men are at greater risk of suicide than lesbian and bisexual women. Whilst these analyses are useful in providing an indication of the size of the potential at risk population, caution should be aired when interpreting the results of such surveys. Surveys

can be prone to both selection and reporting bias which may affect results; for example, women may be more likely to disclose previous suicidal thoughts and attempts than men, and thus the difference in the proportion of persons admitting to previously attempting to commit suicide may be skewed by underreporting by men. Additionally, as surveys by their nature involve interviewing people, LGB persons who have died as a result of suicide will not be included in either of the GALOP or Stonewall surveys; the higher rate proportion of lesbian and bisexual women attempting suicide (than gay and bisexual males) may not represent an actual higher rate, but may be due to more men dying as a result of suicide (thus going unreported in the aforementioned surveys), with women perhaps attempting suicide as a means of a cry for help.

It is difficult to glean further information on those LGB persons who have died as a result of suicide in Westminster from local suicide audits as sexuality is not recorded at the time of death registration.

Homelessness

Homelessness presents a particular challenge to Westminster, with historically very high numbers of homeless people compared to the rest of England. In 2006/07 Westminster City Council accepted a statutory duty to 664 households as homeless, with an additional 100-150 persons sleeping rough³².

Research suggests that suicide is more common in homeless people than in the population as a whole³³ which is unsurprising given the characteristics of those individuals at increased risk of becoming homeless. Such individuals include people leaving institutions such as local authority care, prison and the armed forces and victims of child abuse, many of whom have mental health and/or substance misuse problems.

The extent of suicide amongst homeless people is difficult to ascertain because often coroner's court records do not distinguish between homeless persons and the general population. Coroner's records often only show the last known residence of the deceased, an address likely to be that of a family member and not the last known temporary address of the deceased.

In a Shelter³⁴ study of coroner's court records in an Inner London borough, 18% of people who committed suicide during the study period were homeless at the time of death. Similarly, a local suicide audit (July 2006 to June 2007) of Westminster 'residents' (i.e. excluding deaths of persons with non-Westminster addresses, but who died in the borough) found that 15% with documented living arrangements were living in sheltered or hostel accommodation at the time of death³⁵.

Men aged between 26 and 44 were the largest at risk group, whilst women with children were the least likely to commit suicide; suicidal thoughts and tendencies, however, were widely reported by these women.

Shelter³⁶ identified persons in unsupported accommodation as particularly at risk of suicide; such accommodation included houses in multiple occupation, bed and breakfast accommodation, squats and rough sleepers. Many of the rough sleepers who committed suicide were known to have recently left local authority custody and simply had nowhere else to go; this is unsurprising in London where approximately 2,000 offenders are released from London based institutions each year, with additional offenders coming to London on their release from prisons across England.

Substance misuse

Substance misuse is a well recognised risk factor for suicide, with both drugs and alcohol known to lower inhibitions as well as causing psychosocial disruption and contributing to mental health problems. A recent meta-analysis

estimated a 7% lifetime risk of suicide in alcohol dependent persons, although other studies have reported a lifetime suicide risk as high as 15%³⁷.

Whilst men are more likely than women to be alcohol dependent, women who abuse alcohol are at greater risk of suicide than men who abuse alcohol; the risk of suicide in alcohol dependent women is 20 times that of the general population compared to a risk 6 times that of the general population in alcohol dependent men¹⁷.

Although the number of people with an alcohol dependence in Westminster is unclear from local data sources, the Department of Health Alcohol Needs Assessment Research Project³⁸ estimates that 38% of men and 16% of women aged 16-64 have an alcohol use disorder; within this 32% of men and 15% of women are thought to be hazardous/harmful drinkers^b, with a further 6% of men and 2% of women dependent on alcohol^c. This is equivalent to 11,644 hazardous/harmful drinkers in Westminster, with a further 2,076 alcohol dependent.

Whilst the alcohol needs assessment found that London had a lower than national average proportion of hazardous/harmful drinkers, the proportion estimated to be alcohol dependent in London was one of the highest in England.

Applying the risk of suicide estimated in the published literature to the Westminster population suggests that between 145 and 311 Westminster residents (mostly men) who are alcohol dependent will commit suicide in their lifetime.

^b Hazardous/harmful drinker defined by WHO as a person drinking above the recognised 'sensible' drinking levels and at risk of or experiencing harm.

^c Alcohol dependence defined by WHO as a persons drinking above the recognised 'sensible' level and experiencing harm and symptoms of dependence.

Westminster has relatively large problem drug using population compared to the rest of the country; latest available data estimates that there are approximately 3,158 problem drug users in Westminster³⁹.

The risk of suicide in persons who abuse drugs is estimated to be higher than those who misuse alcohol, with the risk of suicide 20 times that of the general population⁴⁰. Based on local public health mortality files, this means that the odds of dying as a result of suicide in Westminster are 1 in 67 for those who abuse drugs (odds of dying from suicide in the Westminster population are 1 in 84).

Deliberate self-harm

Self-harm is defined by NICE as a 'self-poisoning or self-injury, irrespective of the apparent purpose of the act'⁴¹.

Self-harm is an important risk factor for suicide; the risk of suicide in persons following an episode of self-harm is between 50 and 100 times greater than in the general population^{42,43}. The risk of suicide is highest in men and increases with age in both men and women.

Whilst not all persons who self-harm have suicidal thoughts or go on to commit suicide, approximately 60% of persons who die as a result of suicide have a history of self-harm, with 25% of persons estimated to have previously been in contact with secondary care services as a result of their self-harm (Keith Hawton, personal communication). This would suggest that approximately 15 people each year who commit suicide in Westminster have previously self-harmed, with 6 of these persons having attended hospital at some time previously as a direct result of self-harm.

Since most cases of self-harm do not seek medical attention it is difficult to estimate the prevalence of self-harm from hospital attendance data⁴⁴. Meltzer *et al*⁴⁵ estimated that between 4.6% and 6.6% of people had self-harmed,

although this is likely to be a conservative estimate. Applying prevalence estimates to the local population suggests that between 9,903 and 14,208 people have self-harmed in Westminster.

An estimated 4-5% of self-harmers go on to commit suicide (Keith Hawton, personal communication). Based on national prevalence estimates of self-harm, this suggests that between 446 and 639 Westminster residents with a history of self-harm will go on to commit suicide in their lifetime.

The risk of self-harm is not uniform across the population, with some population groups at greater risk than others. A number of risk factors for self-harm have been identified⁴⁶:

- life events such as bereavement or relationship problems
- social isolation
- mental illness
- substance misuse
- child abuse
- domestic violence

Self-harm is more common in adolescents and young adults. Although older persons are much less likely to self-harm (approximately 5% of all cases of self-harm occur in persons age 65 and over), the outcome is often more serious; it is estimated that 1 in 5 older people who self harm will die as a result of suicide⁴⁷. Self-harm in older persons is likely to be a particular concern for Westminster given the demographic profile and demographics of the older population.

Probation Service Clients

Evidence suggests that prisoners are at greater risk of suicide than the general population⁴⁸, however, the robustness of such observations is limited as the prison and general populations are intrinsically different (for example, by sex, gender, ethnicity, social class, physical and mental health and substance misuse) confounding comparisons.

In a recent Home Office Study⁴⁹, 47% of all prison deaths were the result of suicide, the most common mode of death in prisoners between 1996 and 1997.

Since there are no prisons in the City of Westminster, NHS Westminster is not directly responsible for the care of any prison populations; however, transfer of information relating to prisoners into prisons is an issue. Whilst prisoners are known to have a high suicide risk, people serving community sentences are also likely to be at increased risk. The Probation Service estimates that approximately 1500-2000 individuals in Westminster are under probation supervision in any year.

A Home Office⁵⁰ study found the mortality from suicide in community offenders to be significantly higher than the general population and also higher than that observed in prisoners.

In this study offenders on community sentences were between 9.1 and 13 times more likely to die as a result of suicide than the general population. The risk of dying as a result of suicide increased with age; males aged 55-64 years old were more than 25 times more likely to commit suicide than 55-64 year old males in the general population.

Standardised Mortality Ratios for suicide in men, 1996-1997

	Standardised Mortality Ratios		
	General population	Community offenders	Prisoners
1996	100	997	922
1997	100	1307	800

Other factors associated with increased risk of suicide in offenders on community sentences included time since release from prison, with over a quarter of all deaths occurring in the first month after release.

Applying mortality rates from the Home Office study to the estimated number of community offenders in Westminster suggest that there could be 1-2 suicides in individuals under probation supervision each year. Collaboration and information sharing with the Probation Service may help enhance suicide prevention.

Other population groups

Suicide and attempted suicide is not restricted to the population groups discussed in this paper. Persons experiencing traumatic life events or major changes in circumstances such as the breakdown on a relationship or experiencing employment or bereavement (particularly as a result of suicide) are at increased risk of suicide than the general population. There is currently limited published literature describing the size of risk associated with such occurrences; whilst local suicide audits may identify associations, further robust research and analysis is required to understand the size or risk and quantify the number of people at risk in Westminster.

Summary

Whilst a number of risk factors and at risk population groups have been identified, the presence of depression appears to be the common underlying condition reported in the described population groups. For example homeless, substance misusing and LGBT populations are more likely to experience depression than the general population, which likely contributes to their increased risk of suicide. Life events such as loss and bereavement are associated with depressive episodes and even in persons with psychosis, the risk of suicide is greatest during non-psychotic depressive phases of illness.

Periods of transition, adjustment or significant changes in life circumstances also appear to pose increased risk; for example, risk of suicide in offenders on community sentences is highest in the first month after release and in students at the end of the academic year and between semesters.

Local analysis of suicide and undetermined injury in Westminster: 2005-2008

Whilst the findings of published literature are useful to describe the main risk factors associated with suicide and identify at risk populations both locally and nationally, given the demographic and health profile of Westminster, a more detailed approach is required. Understanding the local epidemiology of suicide and attempted suicide in Westminster may identify trends not observed nationally and may also identify at risk groups specific to Westminster. Together with more robust national data (based on larger numbers); this focused local analysis will begin to inform targeted interventions that will be most effective in the borough.

A local audit of public health mortality files was conducted of suicides and undetermined injuries between 2005 and 2008. This time frame was considered appropriate as prior to this time robust complete data was not available. The impending suicide prevention strategy will be launched in 2009 and cover the next three years up until 2012; it, therefore, seems appropriate that data covering the three years preceding the strategy is considered .

All suicides that occurred within Westminster in the time period examined were considered to understand the number and characteristics of people potentially coming into Westminster to commit suicide as well as Westminster residents. This is important because not only will the impending suicide prevention strategy aim to reduce the suicide rate in Westminster residents, but it will aim to reduce the number of non-residents committing suicide in the borough. Considering these as two distinct groups is difficult given the small numbers involved, however, where possible a distinction has been made, particularly where there are epidemiological differences between the groups.

Suicides and undetermined injuries were identified from Public Health Mortality Files using the International Classification of Diseases – Version 10 codes X60-X84 and Y10-Y34, excluding Y33.9.

Whilst trends have been described it is important to note the small numbers involved; therefore, any inferences drawn from this local audit should be viewed in association with more robust national data and research. For reasons of confidentiality numbers below 5 have been suppressed for distribution outside of NHS Westminster.

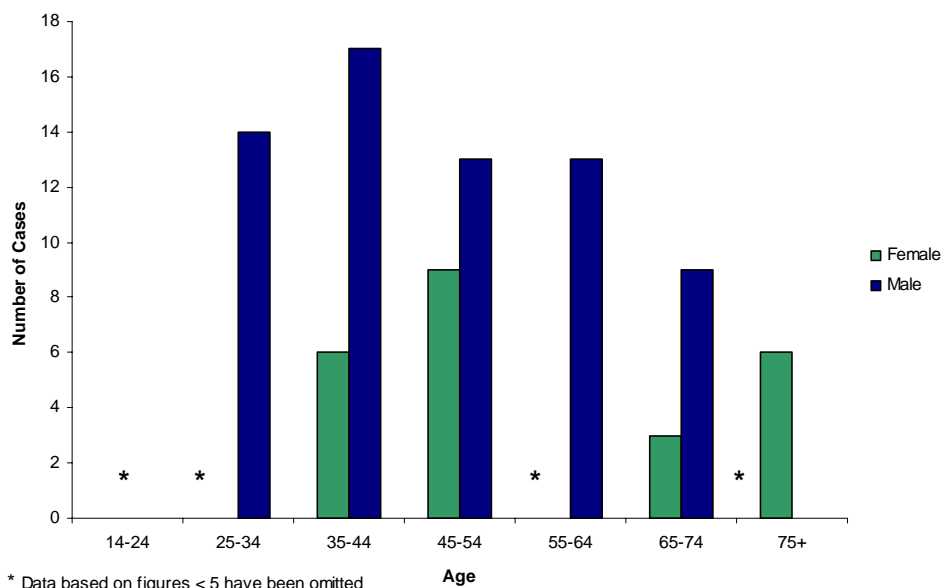
Between 2005 and 2008 there were 74 deaths from suicide and undetermined injury amongst Westminster's population, with a further 33 deaths in the borough of non-residents. 31% of suicides in Westminster were non-residents, a relatively high proportion compared to the rest of the country.

Suicide and deaths due to undetermined injuries involving non-Westminster residents represented 31% of suicides in the borough, which is unsurprising given the transient nature of the Westminster daytime population; whilst 234,100 people are resident in the borough, the daytime population is thought to increase to as many as 1 million, including tourists, visitors, commuters and students, thus there is a large volume of people passing through the borough on a daily basis.

Age and Gender

Males accounted for 69% of suicides in the borough, a proportion slightly lower than observed in London and England. Most male deaths occurred in younger men, typically aged between 25 and 44, however, there were still significant numbers of suicides occurring in males aged between 55 and 74. This is consistent with the age trends observed nationally.

Suicide and undetermined injury in Westminster by age and sex, 2005-2008



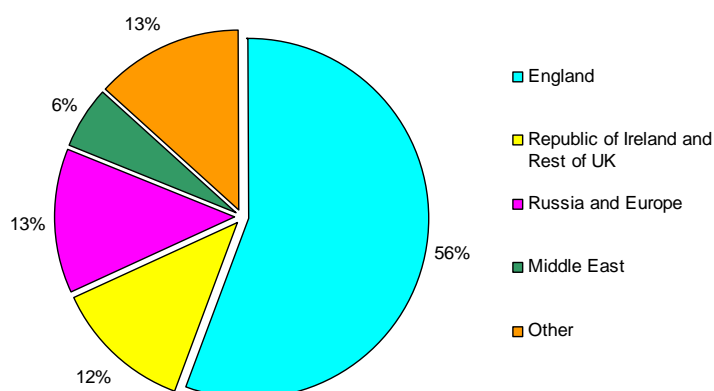
The age profile of female suicides and undetermined injury is slightly older than that demonstrated for males, with peaks in the 35-44 and 45-54 age groups; in contrast to men, the numbers of suicides in 25-34 year old women were low. The number of suicides in the 75 and over age group is also particularly high; this is the only age group in which the number of deaths is higher for females than for males. Given the relatively small proportion of the population that persons aged 75 and over constitute, the suicide rate in persons aged 75 and over is proportionately higher than that for the population as a whole. 5.3% of the Westminster population is aged 75 and over whilst 10% of the total deaths from suicide occurred in this aged group (in women this trend is even more marked, 6% of the female population of Westminster is aged 75 and over whilst 18% of suicides in women occurred in this age group). This is in line with trends observed nationally; however, the proportion of deaths in Westminster's older persons (compared to the

proportion of the population older persons represent) is much higher than that observed nationally, particularly in women^d.

Place of birth

Whilst limited data collected on ethnicity prevents the characterisation of groups more likely to commit suicide by ethnic group, some inferences can be drawn from the place of birth recorded on Public Health Mortality Files. The largest proportion of suicides occurred in persons born in the UK and Republic of Ireland (66%), with persons born in the Middle-East, Russia and Europe accounting for smaller but significant proportions of suicides. Of the 13% of deaths occurring in persons born in 'other' countries, such countries included India and African and Caribbean nations.

Suicide and undetermined injury in Westminster by age and sex, 2005-2008



Given the most recent estimates of the ethnic make-up of the Westminster population, the distribution of suicides described above is not unexpected; no particular nationality appears to be more at risk than another.

^d Age-specific rates were not calculated because rates based on small numbers are not reliable and also as this local analysis includes both Westminster residents and non-residents it is not possible to determine the denominator or persons at risk.

Published research, however, suggests that the pattern of suicide and attempted suicide varies by ethnicity. The suicide rate in young Asian women is twice the national average⁵¹. Whilst the reasons for this are complex, it has been suggested that unhappy domestic situations and the cultural belief that divorce brings dishonour to a family may be common contributing factors.

The risk of suicide in young Asian men is thought to be lower than in White British men, whereas the risk is higher in Black African and Black Caribbean young men⁵².

Regular suicide audits of coroner's files to supplement the limited data provided in the Public Health Mortality Files will lead to a better understanding of the relationship between ethnicity and suicide in Westminster.

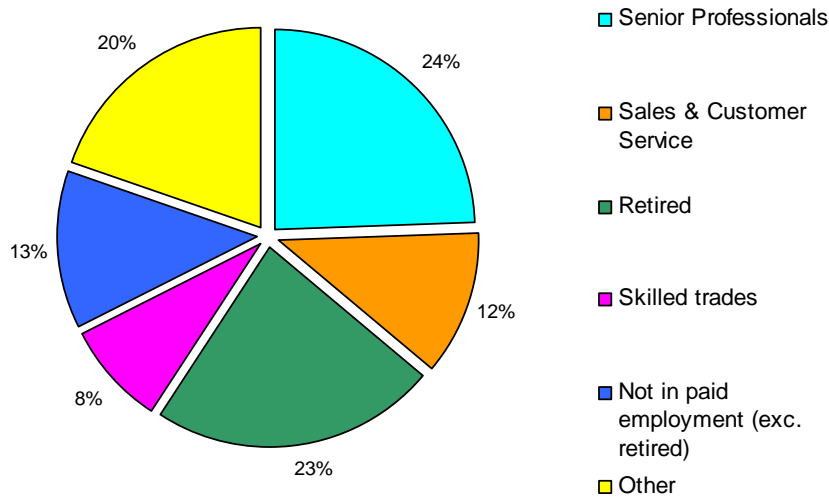
Occupation

Evidence suggests that certain occupational groups such as vets, farmers, pharmacists, doctors and nurses are at increased risk of suicide compared to other occupational groups because of the ease of access to means, including medications and chemicals⁵³. Analysis of suicides in Westminster, however, did not highlight such occupations as high risk.

According to research men in unskilled employment are another at risk group, however, again there was no evidence of this in the Westminster population.

In Westminster senior professionals such as company directors accounted for almost a quarter of suicides in those cases where occupation was recorded (data was missing in 20% of cases). Retired persons also accounted for a similarly large proportion of deaths in Westminster (23%), which is unsurprising given the high proportion of suicides in persons aged 75 and over in Westminster.

Suicide and undetermined injury in Westminster by occupation, 2005-2008



A number of studies have suggested an association between unemployment and suicide, particularly in young men⁵⁴. No such association was identified in the local audit, however, this may be attributable to the poor recording of employment status on death records; 20% of mortality files stated the occupation as unknown and, therefore, it is feasible that some of these persons are likely to be unemployed. There was, however, no formal record of their unemployment and so this cannot be officially documented.

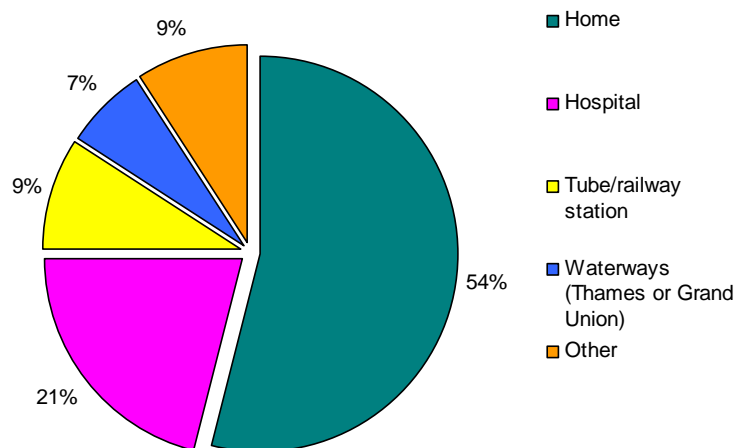
Because of the large amount of missing data, associations between occupation and suicide should be interpreted with caution. A more detailed analysis of individual cases using coroner's case files may provide more information surrounding the employment status of individuals who commit suicide in Westminster. Of particular interest in Westminster might be the senior working professionals since there is limited published research describing these persons as an at risk group.

Place of death

From the data available it is difficult to ascertain where people actually commit suicide; Public Health Mortality Files refer to where deaths were confirmed, therefore, a relatively large proportion of deaths are classified as hospital deaths.

The most common place of death for Westminster residents was at home (54%), however, it is likely that in the case of a large proportion of the hospital deaths, the suicidal incident also occurred at the person's home. Other places of death recorded for Westminster residents included at tube stations or on the overground railway network, the River Thames or Grand Union Canal, hotels, or other residential addresses.

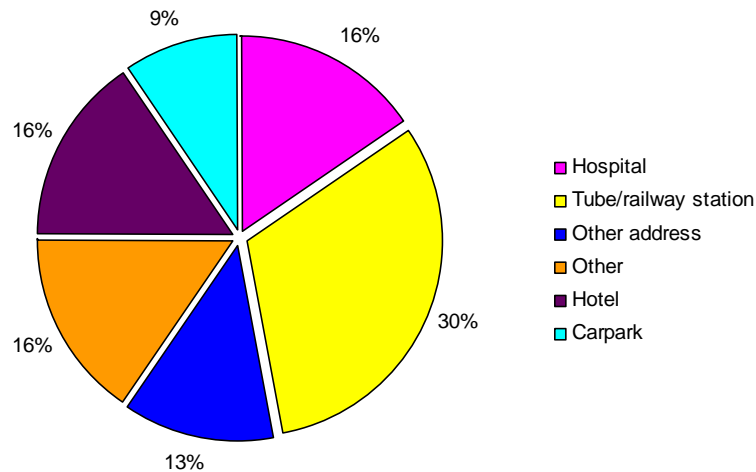
Suicide and undetermined injury in Westminster by place of death, 2005-2008 (residents)



The place of death for non-Westminster residents highlights different locations of suicidal activity to those identified for residents. The majority of non-residents died at a tube station or on the overground rail network (30%), with

hotels, car parks and other residential addresses accounting for other sites for suicide.

Suicide and undetermined injury in Westminster by place of death, 2005-2008 (non-residents)



Whilst broad trends in place of death have been established, no hotspots were identified such as a named bridge, hotel or particular tube station; however, given the relatively significant proportion of suicides that occurred at tube stations in Westminster, additional analysis of such incidents warrants further scrutiny (see later sections).

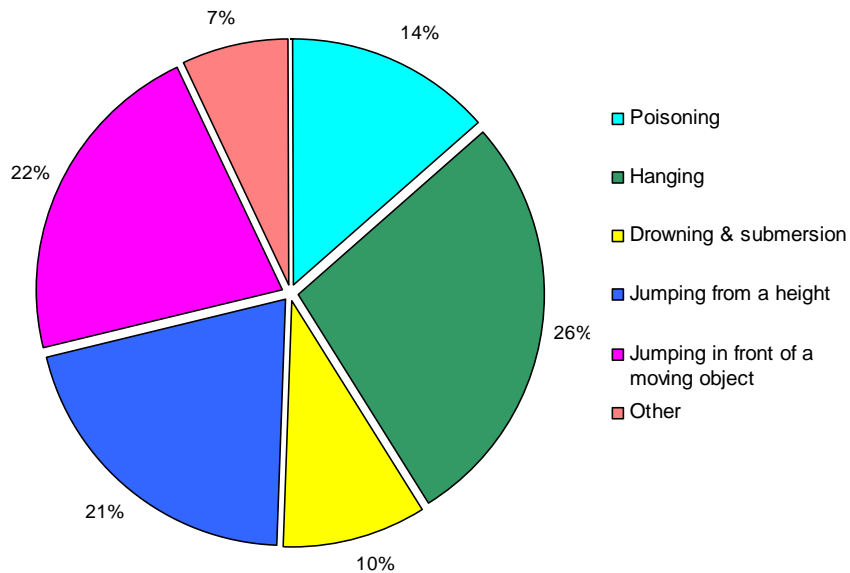
Cause of death

The method of suicide favoured by males was likely to be more violent than the means chosen by women. Hanging accounted for the largest proportion of male deaths, 26%; this is much lower than reported nationally (50%), a proportion that is increasing, particularly in young persons (nationally).

In England the second most common means of suicide in males is self-poisoning, however, this only accounts for 14% of suicides in men in Westminster. Jumping from a height and jumping in front of a moving object

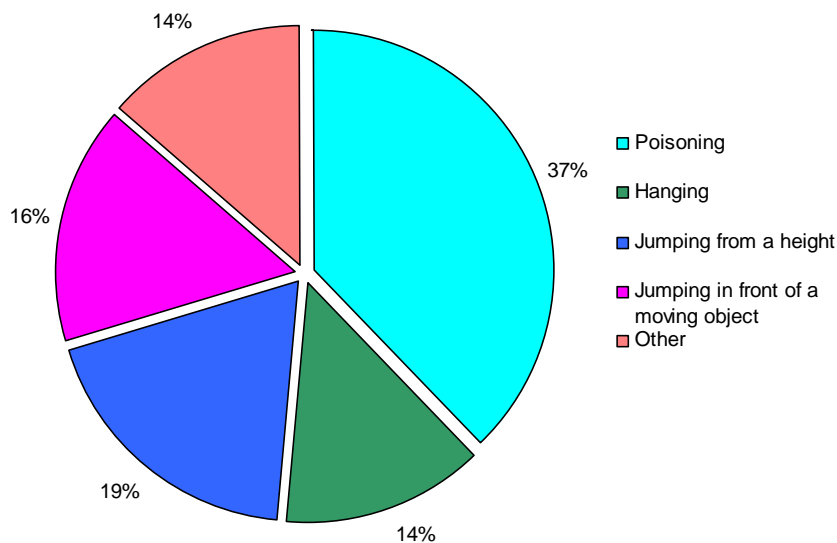
are much more common in Westminster (accounting for 21% and 22% of suicides in men respectively), but account for only 10% of deaths nationally; this is most likely associated with access to means.

Suicide and undetermined injury in Westminster by cause of death in men, 2005-2008



Among women, drug or other related poisoning is the most common method of suicide both nationally and in Westminster, accounting for 38% and 37% of suicides respectively. Whilst hanging is a relatively common method of suicide in England (35% of suicides in women), this is not the case in Westminster, with other means including jumping from a height and jumping in front of a moving object also common.

Suicide and undetermined injury in Westminster by cause of death in women, 2005-2008

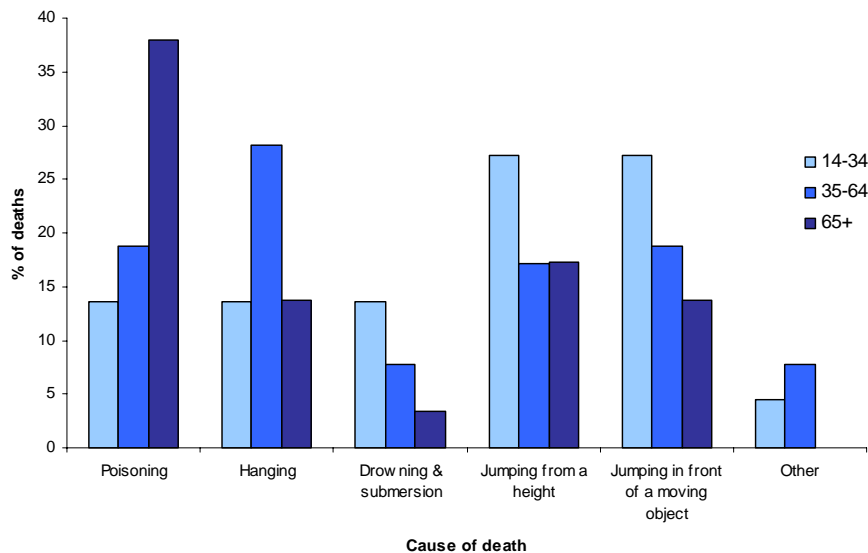


Persons (males and females) aged between 14 and 34 were more likely to jump from a height or jump in front of a moving object (50% of all suicides in this age group) than any other age group, whilst persons aged 65 and over favoured poisoning as a means of suicide (38%). This again may reflect access to means; for example, younger people are likely to be much more mobile and travel on the underground, and older persons may be more likely to be on long-term medication for chronic diseases and thus have increased access to drugs.

From local audits it is difficult to identify trends in the types of drugs used in completed suicides given the small numbers involved, however, most suicides involved multiple drugs, 38% of all poisonings.

National studies suggest that the drugs most frequently used in suicides include co-proxamol (30% of suicides), tricyclic antidepressants (23%) and other analgesics (16%)⁵⁵.

and undetermined injury in Westminster by cause of death and age, 2005-2008



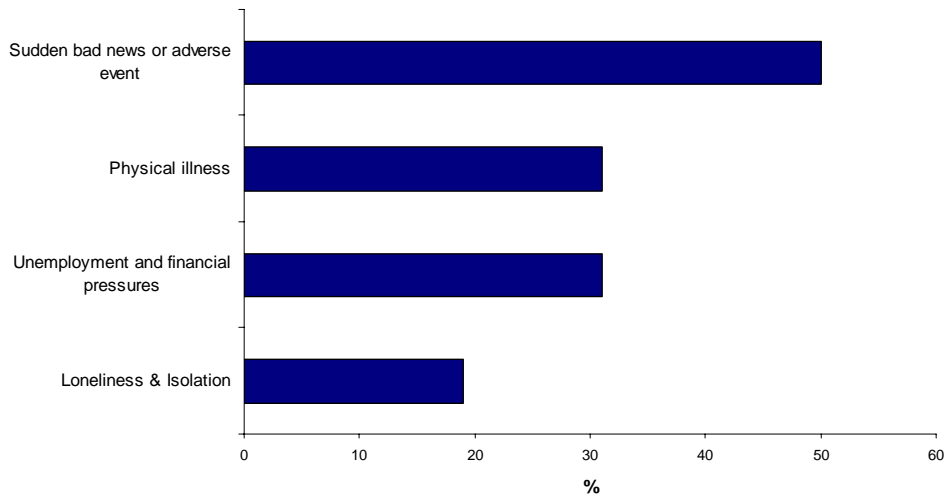
External pressures and behavioural history

Whilst much can be learnt from local auditing of Public Health Mortality Files, further information can be gleaned on the circumstances surrounding suicide from analysis of coroner’s reports.

External pressures such as loneliness, isolation, divorce, unemployment and bereavement are some of the factors identified as associated with suicide in a local Westminster suicide audit, with sudden bad news or an adverse event identified in 50% of cases audited in 2006/07.

Whilst it is difficult to infer to what extent the described external pressures contributed to the decision to commit suicide, it is likely that no singular factor can be described for any one person. Often many factors contribute to suicidal intent; in the 2006/07 audit, 69% of individuals had more than one external pressure; more than three external pressures were reported in 38% of cases.

External pressures reported in suicides of Westminster residents, 2006-2007



Just under half (42%) of cases audited had either previously attempted suicide or expressed suicidal thoughts to a healthcare professional; again although it is difficult to draw conclusions from a small local audit the results are in agreement with the published literature.

Local analysis of self-harm and attempted suicide in Westminster

For every completed suicide there are many more attempted suicides. A previous suicide attempt is the greatest risk factor for suicide; it is estimated that 1% of people hospitalised as a result of a suicide attempt will die within one year and up to 5% within ten years⁵⁶.

Given that a previous suicide attempt is a significant risk factor for suicide, describing the characteristics of people who attempt to take their own life and understanding what happens to people and what services they engage with post suicide attempt is essential to understand how interventions can be targeted to prevent repeat suicide attempts.

The published literature suggests that for every suicide there are between 30 and 40 attempted suicides⁵⁷. Applying this to Westminster's population would suggest that there are between 740 and 987 suicide attempts each year (based on 2005-2007 pooled data, Compendium for Health and Clinical Indicators).

Excluding the difficulties associated with assigning a verdict of suicide, identifying deaths due to suicide or undetermined injury from Public Health Mortality Files is relatively simple. It is, however, particularly difficult to estimate the number of attempted suicides in the Westminster population; many acts of deliberate self harm will occur at home and unless they require hospitalisation they will go unreported. Even if hospital treatment is required, identification of these persons is difficult from hospital administration systems. Without interrogation of individual patient records it is also difficult to determine the degree of intent and distinguish between minor injuries often inflicted as a 'coping mechanism' and more serious suicidal ideation.

Further understanding can be gleaned from services such as Accident & Emergency departments, the Royal National Lifeboat Institute (RNLI), British Transport Police (BTP) and the London Underground; these organisations are often the first line response to acts of attempted suicide on the bridges, river, railways and underground network within Westminster. Whilst A&E data provides an understanding of the number of suicide attempts presenting to hospital, the RNLI, BTP and London Underground specific information will identify those persons who are not necessarily taken to hospital. This in turn will help form a more complete local picture of the number and characteristics of people attempting suicide in Westminster and potentially identify inadequacies in procedures and care pathways whereby people are not being directed to appropriate follow up care, and opportunities to prevent further suicide attempts are being missed.

Given the high proportion of people who attempt suicide who go on to reattempt suicide, it is important to identify and describe those individuals who attempt suicide as it provides an opportunity to develop appropriate and targeted interventions to prevent future attempts.

Describing the incidents according to the service by which they were identified will further facilitate the appropriate targeting of interventions, particularly to those individuals who do not receive hospital treatment as a result of attempting suicide.

Accident and Emergency admissions for deliberate poisoning

The methods by which A&E admissions are coded means identification of persons presenting as a result of attempted suicide is problematic. It is difficult to identify persons who have physical injuries as a result of deliberate self-harm as these persons present to A&E with a range of physical injuries; these injuries are coded according to the type of injury, for example a laceration. Whether the injury was accidental or intentional is not clear from such data.

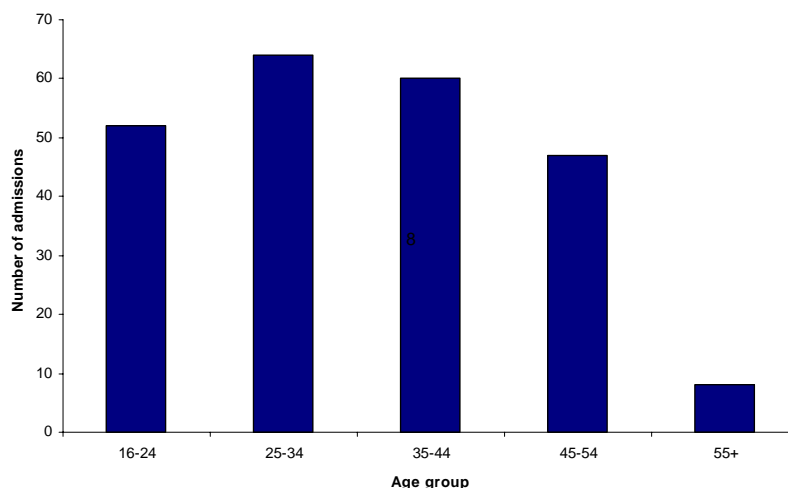
Persons presenting to A&E as a result of deliberate self-poisoning can, however, be identified. These cases, although significant in number are likely to represent only a small proportion of all attempted suicides (self-injuries and self-poisonings) that present to A&E and an even smaller proportion of all attempted suicides in Westminster.

As one of the main A&E departments in Westminster, a large proportion of deliberate self poisonings in Westminster residents that seek hospital care will present to St Mary's A&E.

Although there are over 300 admissions each year for overdose and poisoning, on average approximately 80 of these are thought to be intentional (based on 2006-2008 admissions data).

The majority of persons presenting to St Mary's are young and working age adults; although this is not necessarily indicative of a young population deliberately poisoning themselves it suggests that young and working age adults are more likely to come into contact with secondary care hospital services as a result of self poisoning .

A&E admissions for deliberate poisoning by age, 2006-2008

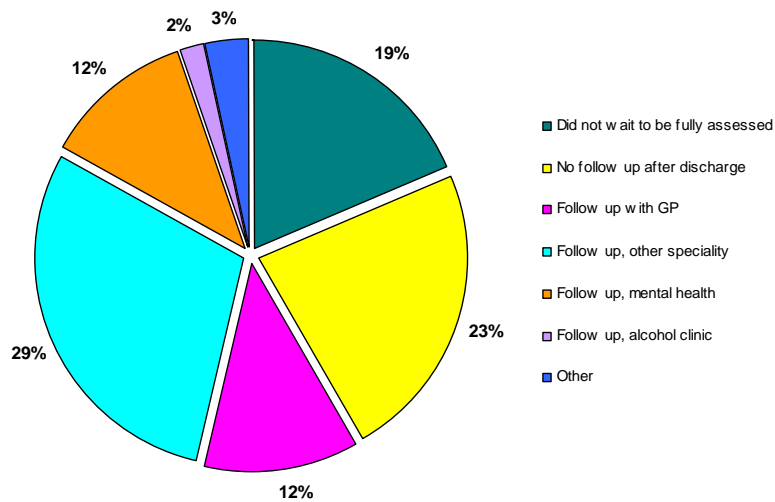


Imperial College Healthcare NHS Trust

Upon admission to A&E as a result of deliberate poisoning, all patients are assessed by a psychiatric liaison nurse. In terms of what happens to patients after A&E assessment, 41% of patients are referred onward to another speciality (including mental health and alcohol specialities); 19% leave prior to being fully assessed whilst 23% are treated in A&E but are not offered further care and so are discharged with no documented follow up. Whilst this may reflect the future care needs as assessed by health care professionals, without more detailed analysis on a case by case basis it is difficult to assess the level of follow up care required for each patient admitted. It would, however, appear that a relatively small proportion of patients are directly referred to mental health services after an admission for suspected deliberate poisoning.

19% of individuals leave A&E without being fully assessed and it is unclear how many of these remain in A&E long enough to receive a psychiatric assessment. Whether these patients go on to attempt suicide again is unclear, however, engagement with these persons is essential to ensure that individual health care needs are assessed and appropriate follow up care packages are tailored to prevent further episodes.

Follow up of A&E admissions for deliberate poisoning, 2006-2008



Imperial College Healthcare NHS Trust

Whilst the number of persons presenting to A&E is significant, they are likely to represent just the tip of the iceberg; evidence suggests that most deliberate poisonings occur in the home, many of which do not make it to hospital.

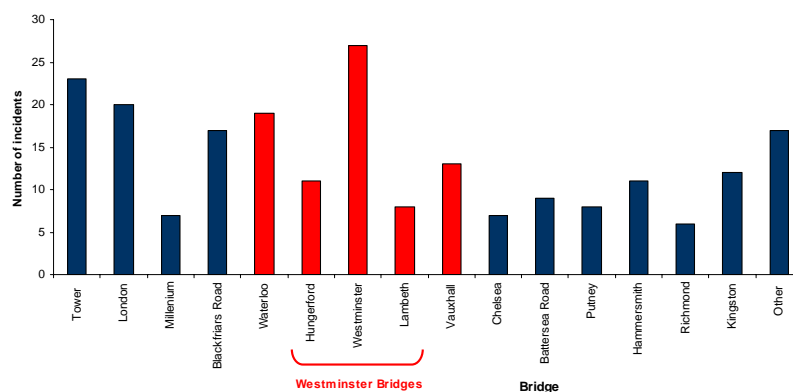
Royal National Lifeboat Institute (RNLI)

The RNLI Thames Pier Station by Waterloo Bridge responds to incidents on the Thames River from Barking to Battersea and, thus covers incidents on the bridges and river that form the southern boundary of the City of Westminster.

Of the 741 incidents responded to in 2008, 29% involved persons threatening to jump from a bridge, 5% were deaths in the water and a further 17% were confirmed persons in the water. Although data does not allow the RNLI to officially distinguish between persons in the water as a result of an accident and those that deliberately jumped in (this would be determined by the coroner in the case of a fatality), the RNLI reports that most of these were thought to be deliberate acts.

In total there were 215 actual or threatened suicide attempts on the River Thames; of these incidents 36% occurred on bridges into/out of the City of Westminster, however, all individuals rescued are brought to land at the station at Waterloo Bridge and, therefore, come within the ambit of the City of Westminster.

Suicide and attempted suicide on the River Thames, 2008



The bridges upon which most suicidal activity seems to occur tend to be high profile bridges such as Tower Bridge and London Bridge, near high profile landmarks such as Westminster, or those in particularly busy areas with large numbers of people/motorists crossing them such as Waterloo. Within Westminster, Westminster and Waterloo Bridges may be considered as 'hotspots'; these locations should be considered in the suicide prevention strategy for targeted prevention interventions.

Detailed data is not routinely collected by the RNLI describing the characteristics of persons either threatening to jump or jumping from bridges into the River Thames; however, RNLI coastguards have made a number of informative observations over the years they have been operating out of Thames Pier:

- approximately 70% of incidents involve men
- women are more likely to threaten to jump, whereas men are more likely to actually jump
- incidents predominantly involve young adults
- approximately half are born outside of the UK
- many have observable evidence of previous self-harm
- some are known to be either missing persons or homeless
- most incidents occur during the warmer months of May to September
- many are repeat episodes

The London Ambulance Service will attend incidents where called and if necessary take individuals to hospital for treatment; as previously highlighted St Mary's A&E department will request a psychiatric assessment of such individuals, however, there is no clear protocol concerning which hospital individuals are taken to, and despite those being rescued being brought to land within the City of Westminster, an individual may be taken to an A&E department outside of the borough. It is, therefore difficult to map precisely what follow up and level of care individuals receive after an attempted suicide or episode of suicidal ideation.

As a voluntary life saving organisation, the RNLI have no jurisdiction to detain people who have jumped from a bridge. For those where hospitalisation is not required there is little in the way of follow up care or interventions to address the issues which led to the suicidal incident in the first instance and potentially prevent further suicidal acts. Whilst police officers might attend incidents, there again is little consistency in what happens to individuals after an attempted suicide, with no policies currently in place setting out where individuals should be taken for follow up or signposted to for help.

With many of the cases identified by the RNLI involving the same individuals there is clearly a disconnect in the follow up (or absence of follow up) of persons either threatening suicide or attempting suicide, with no consistently followed protocols currently in place.

London Underground in Westminster

Suicidal activity on the London Underground appears to have risen with increasingly availability of access; O'Donnell & Farmer⁵⁸ describe a positive correlation between the number of passengers and the number of suicides.

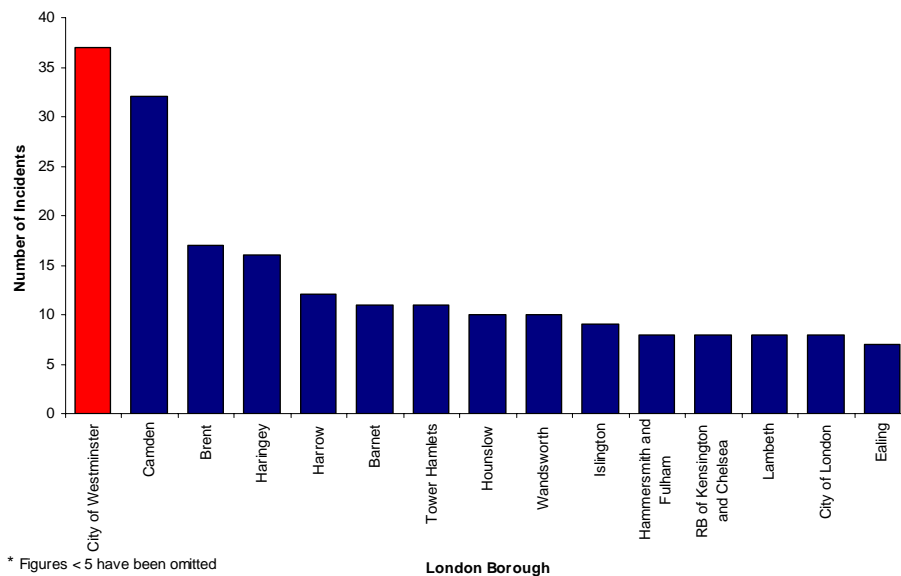
Westminster has one of the highest passenger footfalls on the London Underground network; approximately 770,000 people pass through tube stations in Westminster each weekday. Unsurprisingly, 16% of all suicides and suicide attempts on the London Underground in recent years have occurred in Westminster, the largest proportion of any London borough.

Identification and classification of suicides and attempted suicides on the railway network is problematic and relies upon evidence of intent, for example credible eyewitness accounts, driver's statements, CCTV and suicide notes. Therefore, the number of incidents described may underestimate the true size of the problem, particularly in relation to suicide attempts (completed suicides will be subject to scrutiny and investigation by the coroner).

In this analysis attempted suicide and completed suicide refers to incidents that resulted in persons on the track; however, it is estimated that for every one incident in which an individual ends up on the track there are three people that either change their mind, are physically prevented from jumping or are dissuaded from jumping by either a member of staff or the public. Because these incidents do not affect the running of trains they do not have not be logged and documented; therefore, it is likely that any recorded suicidal activity on the London Underground is likely to underestimate the true extent of the problem.

Between 1997 and 2008 there were 55 attempted suicides and 37 completed suicides within the City of Westminster boundaries; for every 3 suicide attempts there were two completed suicides. Based on London Underground estimations of the number of persons exhibiting suicidal intent on platforms, but who do not end up on the track, there may have been an additional 276 people contemplating suicide on the London Underground during this time.

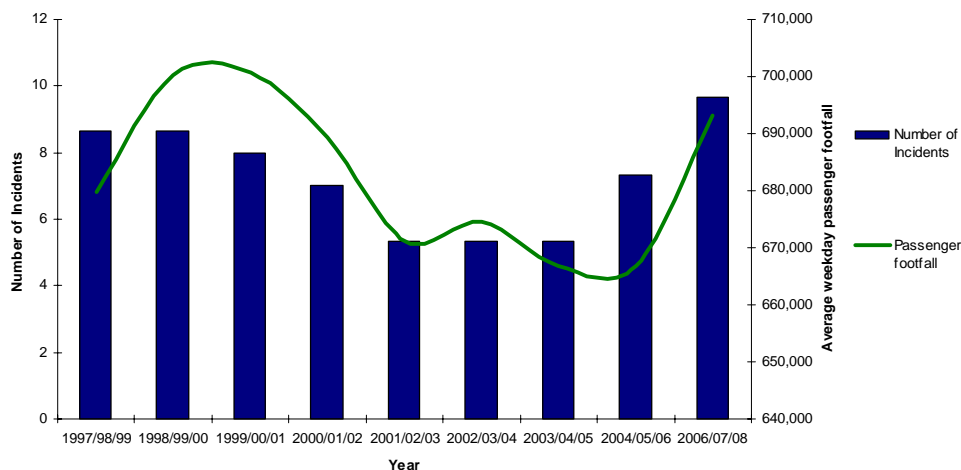
Suicide and attempted suicide on the London Underground, 1997-2008



London Underground, 2009

The number of incidents remained relatively stable between 1997 and 2008 with a small downtrend observed between 2001 and 2005; this may be a result of decreased passenger footfall due to refurbishment and engineering works at some of the larger stations such as Oxford Circus during this time.

Suicide and attempted suicide on the London Underground, Westminster



London Underground, 2009e

Most incidents occurred at those stations with the highest passenger footfalls including Green Park, Oxford Circus, Embankment and Victoria stations. The proportion of incidents with an outcome of death was consistent at each of these stations; 40% of attempts resulted in death.

Within Westminster, Green Park, Embankment, Oxford Circus and Victoria may be considered as ‘hotspots’ accounting for 45% of incidents; these locations should be considered in the suicide prevention strategy for targeted prevention interventions.

^e Three year rolling averages were used to monitor and describe the trend in incidents over time; this prevents drawing undue attention to year on year fluctuations instead of underlying trends.

In their studies of suicide on the London Underground, O'Donnell and Farmer⁵⁹ found that the number of incidents was lowest on a Sunday, but there was no difference in the Monday to Saturday rates. Analysis of Westminster data suggested no association between day of week and number of incidents.

The number of incidents in Westminster was relatively constant throughout the day, with most incidents occurring between 09:00 and 21:00; this is consistent with the published literature.

Whilst small numbers prevent further analysis of local data, O'Donnell and Farmer suggest that while the number of incidents involving men is constant throughout the day, incidents involving women were more likely to occur between 10:00 and 13:00.

Men accounted for 64% of all recorded suicides and suicide attempts between 1997 and 2008, however, females were much more likely to survive an attempt than males; 45% of incidents involving men ended in death compared with 24% involving women.

Unlike the RNLI, the British Transport Police (BTP), who respond to incidents on the London Underground network, have much greater powers to detain persons in mental distress. Persons who have sustained physical injuries are taken to A&E (not necessarily in Westminster); however, those that do not have physical injuries can be sectioned and taken to either The Gordon or St Charles Hospitals for psychiatric evaluation.

Preventing suicide

Suicide is relatively rare and identifying those who are likely to commit suicide is 'hit and miss', therefore, interventions aimed at the whole population level are likely to be the most effective. However, such approaches are mainly within the ambit of national government and can be high cost; therefore, at PCT level, interventions are focussed mainly on those who can be individually identified as being at high risk of suicide.

Current suicide prevention related activity in Westminster can be considered in terms of five types:

- general population or sub-population interventions
- interventions aimed at 'high-risk' groups
- interventions aimed at those who have attempted suicide or have suicidal ideation
- means restriction
- reviewing and improving services.

General population or sub-population interventions

Much of the general population suicide prevention activity in the borough concerns promoting and maintaining good mental health and well-being. These services are delivered by a range of providers and include increasing mental health awareness amongst professionals, for example, Children and Adolescent's Mental Health Service tier one workers, older people, new mothers, children, teachers and school nurses.

One area where possibly more mental health promotion is needed is amongst young men with depression. Suicide is the second most common cause of death among men aged 35 and under; as a group young men are less likely to seek help with mental health problems than other groups in the population.

Interventions aimed at high risk groups

Currently in Westminster there are many services that could be seen as delivering suicide prevention to 'high risk' groups; this includes services delivered by Westminster City Council, MIND, CNWL, Citizens Advice Bureau, Probation Service, British Transport Police, Metropolitan Police, primary care teams, universities, Youth Offending Team, CAMHs, bereavement services and the voluntary sector.

Interventions aimed at those who have attempted suicide or have suicidal ideation

Interventions aimed at those who have attempted suicide or have suicidal ideation in Westminster include counselling services and helplines provided by MIND, PAPYRUS, Central London Samaritans, universities and primary care counselling teams. Those organisations directly responding to suicidal incidents, such as the Royal National Lifeboat Institute, Transport for London, Metropolitan and British Transport Police and the London Ambulance Service also have a role to play in preventing people from attempting suicide, assisting those who are behaving in a way which might indicate a suicide attempt and channelling persons into appropriate care, for example, the Metropolitan and British Transport Police assist people who have attempted suicide and take them to the nearest hospital, acting under the auspices of the Mental Health Capacity Act..

Furthermore, CNWL and CAMHs provide treatment and psych-social assessments to all those presenting to A&E with injuries resulting from self-harm and the Maytree Project based in Islington provides a residential resource for those persons contemplating suicide.

Means restriction

Preventing suicide by way of means restriction aims to prevent suicide by making it more difficult for persons contemplating suicide to do so by restricting access to, for example, medication. The Medicines Management

Team at NHS Westminster recommends prescribing limited quantities of medication to those persons at risk of suicide and also first and second line antidepressants with a lower potential for cardio-toxicity in overdose.

Other means prevention activity includes the regular audits by CNWL of inpatient wards to identify and address potential ligature points and the Underground station design including pits under rails and sliding doors fixed to the platform edge which prevent people jumping onto the tracks and lessen the risk of a fatality if someone gets onto the track.

Reviewing and improving services

NHS Westminster, CNWL and GPs in Westminster are continually reviewing services and auditing procedures and protocols to identify shortfalls in services and policies with regards to suicide and suicide prevention.

Examples of such audit and review include:

- suicide audits
- serious and untoward incident reviews
- GMS contract – significant event reports
- CNWL Suicide Prevention Strategy
- CNWL Risk Assessment and Management Policy
- CPA compliance

Gaps in services

There is a 'prevention paradox' whereby it is difficult to identify those individuals specifically at risk of suicide within the wider high risk groups. Therefore, there is a danger that 'the many' will be inconvenienced by an intervention that can only benefit 'the few'. It has been suggested that the best solutions are those that are low cost, whole population, ones or those that will also benefit the whole group at risk, for example wider access to psychological therapies for people with depression. The only risk groups where this would be an exception would be those who deliberately self-harm, where the high risk of suicide justifies a 'hit and miss' approach.

Comment [BS1]: Don't understand

In addition to those most at risk of deliberate self-harm there is strong evidence that restricting access to the means for committing suicide is effective in reducing suicides – this is because the level of suicide intent varies over time and deterring suicide when intent is at its highest may deter suicide whilst the level of intent reduces.

Although there is a significant amount of activity in Westminster that could be considered as suicide prevention activity there are a number of gaps in services. These gaps can be considered in terms of at risk groups and are summarised in table 1.

Table 1 - Gaps in current suicide prevention activity in Westminster

Risk group	Gap in service
2. Those in contact with mental health services or A & E	<ul style="list-style-type: none"> • support and “holding” arrangements whilst people are awaiting assessment or treatment • a pathway into deliberate self harm services • the volume of borderline personality disorder services.
3. Those in contact with primary care	<ul style="list-style-type: none"> • depression screening • screening for those with depression • The volume of psychological therapy services.
4. Those in contact with other services for “at risk” groups e.g. substance misuse, homelessness, offender management, counselling, help lines	<ul style="list-style-type: none"> • awareness training for staff in these services on suicide risk and how to respond to it • signposting/referral guidance to staff in these services • gatekeeping arrangements to ensure appropriate referrals into mental health services • ability to support clients who are suicidal but are not eligible for treatment in mental health services and not registered with a GP.
5. Those who are not in contact with any services	<ul style="list-style-type: none"> • targeted mental health promotion for young men to encourage self referral • not all people who attempt suicide on railways and waterways are immediately taken for psycho-social assessment at A & E or psychiatric hospital • insufficient access to counselling and support for those bereaved by suicide or other sudden cause of death • advice/support to hotels on responding to potential suicides • links between prison service/ probation and mental

	<p>health services</p> <ul style="list-style-type: none">• contact, support and activities for isolated older people suffering from depression• identifying people with depression and promoting good mental health
--	--

References

- ¹ Department of Health (2002). *National Suicide Prevention Strategy for England*. Department of Health. London. Available at http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4009474
- ² World Health Organisation (2001). Suicide Health Topic [Online] Available at <http://www.who.int/classifications/apps/icd/icd10online/>
- ³ World Health Organisation (2007). *International Classification of Diseases* [Online]. Available at <http://www.who.int/classifications/apps/icd/icd10online/>
- ⁴ NHS Information Centre (2008). *Compendium of Clinical and Health Indicators* [Online] Available at <http://www.nchod.nhs.uk/>
- ⁵ National Institute for Mental Health in England (2008). *Suicide Prevention Annual Report 2007*. Department of Health. Leeds. Available at <http://www.its-services.org.uk/silo/files/suicide-prevention-annual-report-2007.pdf>
- ⁶ National Institute for Mental Health in England (2008). *Suicide Prevention Annual Report 2007*. Department of Health. Leeds. Available at <http://www.its-services.org.uk/silo/files/suicide-prevention-annual-report-2007.pdf>
- ⁷ NHS Information Centre (2008). *Compendium of Clinical and Health Indicators* [Online] Available at <http://www.nchod.nhs.uk/>
- ⁸ Shafii M (1989). *Completed Suicide in Children and Adolescents: Methods of Psychological Autopsy in Suicide Among Youth: Perspectives on Risk and Prevention*. American Psychiatric Press.
- ⁹ Office of National Statistics. *Mortality Statistics for England and Wales 1979-1990*. The Stationary Office. London.

¹⁰ Hawton K & James A (2005). Suicide and deliberate self-harm in young people. *British Medical Journal* 891-894.

¹¹ Childline (2007). *Casenotes: calls to Childline about depression and mental health* [Online] Available at www.childline.org.uk

¹² MIND (2007). *Suicide rates, risks and prevention strategies* [Online] Available at <http://www.mind.org.uk/Information/Factsheets/Suicide/Suicide+rates+risks+and+prevention+strategies.htm>

¹³ Office of National Statistics (2001). *2001 Census* [Online] Available at : <http://www.statistics.gov.uk/census2001/census2001.asp>

¹⁴ Office of National Statistics (2000) *Psychiatric Morbidity Survey* [Online] Available at <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=8258&Pos=4&ColRank=1&Rank=272>

¹⁵ Response and Prevention in Student Suicide [Online] Available at <http://www.rapss.org.uk/index.html>

¹⁶ Barraclough B, Bunch J, Nelson B & Sainsbury (1974). A hundred cases of suicide: clinical aspects. *British Journal of Psychiatry* 125 355-373.

¹⁷ Fox S (2008). *Mental Health Needs Assessment*. NHS Westminster

¹⁸ Kay, DWK & Petterson, U (1977). Manic-depressive illness. *Acta Psychiatrica Scandinavica* supp 269 55-60.

¹⁹ Harris, C & Barraclough, B (1997). Suicide as an outcome for mental health disorders. *British Journal of Psychiatry* 170 205-228.

²⁰ Minkoff, K, Bergman, E, Beck, A & Beck, R (1973). Hopelessness, depression and attempted suicide. *American Journal of Psychiatry* 142 559-563.

²¹ Minkoff, K, Bergman, E, Beck, A & Beck, R (1973). Hopelessness, depression and attempted suicide. *American Journal of Psychiatry* 142 559-563.

²² National Institute for Health and Clinical Excellence (2009). *Borderline Personality Disorder* [Online] Available at:
<http://www.nice.org.uk/guidance/index.jsp?action=download&o=43045>

²³ Appleby, L (2001). *Safety First: Five Year Report of the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness*. Department of Health. London.

²⁴ Appleby, L, Dennehy, J, Thomas, C, Faragher, E & Lewis, G (1999). Aftercare and clinical characteristics of people with mental illness who complete suicide: a case-control study. *The Lancet* 353 1397-1400.

²⁵ Appleby, L (2001). *Safety First: Five Year Report of the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness*. Department of Health. London.

²⁶ King, M, McKeown, E, Warner, J, Ramsay, A, Johnson, K, Cort, C, Wright, L, Blizard, R & Davidson, O (2003). Mental health and quality of life of gay men and lesbians in England and Wales: a controlled cross-sectional study. *British Journal of Psychiatry* 183 552-558.

²⁷ Meyer, IH (2003). Prejudice, social stress and mental health in lesbian, gay and bisexual populations: conceptual issues and research evidence. *Psychological Bulletin* 129 674-697.

²⁸ National Institute for Mental Health in England (2007). *Mental disorders, suicide and deliberate self harm in lesbian, gay and bisexual people: a systematic review*. National Institute for Mental Health in England. Leeds.

²⁹ Gibson, P (1989). *Gay male and lesbian youth suicide*. US Department of Health and Human Services: Report of the Secretary's Task Force on Youth Suicide. Government Printing Office. Washington DC.

³⁰ Fox, S (2008). *Lesbian, gay, bisexual and transgender needs profile*. NHS Westminster.

³¹ Stonewall (2008). *Prescription for Change: lesbian and bisexual women's health check 2008* [Online]. Available at:
<http://www.stonewall.org.uk/campaigns/2365.asp>

³² Westminster Primary Care Trust (2008). *Public Health Annual Report 2006/2007* [Online]. Available at:
http://intranet/Library_Intranet/public_health/PHAR0607_full.pdf

³³ Baker, L (1997). *Homelessness and Suicide*. Shelter. London.

³⁴ Baker, L (1997). *Homelessness and Suicide*. Shelter. London.

³⁵ Richardson, L & Lindfield, T (2006). *Suicide in Westminster*. Westminster Primary Care Trust.

³⁶ Baker, L (1997). *Homelessness and Suicide*. Shelter. London.

³⁷ Harris, C & Barraclough, B (1997). Suicide as an outcome for mental health disorders. *British Journal of Psychiatry* 170 205-228.

³⁸ Department of Health (2005). *Alcohol Needs Assessment Research Project: The 2004 national alcohol needs assessment for England*.

Department of Health. London. Available at:

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4122341

³⁹ Westminster Primary Care Trust (2008). *Public Health Annual Report 2006/2007* [Online]. Available at:

http://intranet/Library_Intranet/public_health/PHAR0607_full.pdf

⁴⁰ Faulkner, A (1997). *Briefing No. 1 – Suicide and deliberate self-harm*. Mental Health Foundation. London

⁴¹ National Institute for Health and Clinical Excellence (2004). *Self-harm* [Online] Available at:

<http://www.nice.org.uk/guidance/index.jsp?action=download&o=29424>

⁴² Hawton, K, Zahl, D & Weatherall, R (2003). Suicide following deliberate self-harm: long term follow up of patients who presented to a general hospital. *British Journal of Psychiatry* 182 537-542.

⁴³ Owens, D, Horrocks, J & House, A (2002). Fatal and non-fatal repetition: a systematic review. *British Journal of Psychiatry* 181 193-199.

⁴⁴ Meltzer, H, Lader, D, Corbin, T *et al* (2002). *Non-fatal suicidal behaviour among adults aged 16 to 74 in Great Britain*. The Stationary Office. London.

⁴⁵ Meltzer, H, Lader, D, Corbin, T *et al* (2002). *Non-fatal suicidal behaviour among adults aged 16 to 74 in Great Britain*. The Stationary Office. London.

⁴⁶ National Institute for Health and Clinical Excellence (2004). *Self-harm* [Online] Available at:
<http://www.nice.org.uk/guidance/index.jsp?action=download&o=29424>

⁴⁷ Lawrence, D, Almeida, O, Hulse, G *et al* (2000). Suicide and Attempted Suicide among older adults in Western Australia. *Psychological Medicine* 30 813-821.

⁴⁸ Office of National Statistics (2002). *Prison Statistics England and Wales*. The Stationary Office. London.

⁴⁹ Sattar, G (2001). *Rates and causes of death among prisoners and offenders under community supervision*. The Home Office. London

⁵⁰ Sattar, G (2001). *Rates and causes of death among prisoners and offenders under community supervision*. The Home Office. London

⁵¹ MIND (2007). *Suicide rates, risks and prevention strategies* [Online] Available at
<http://www.mind.org.uk/Information/Factsheets/Suicide/Suicide+rates+risks+and+prevention+strategies.htm>

⁵² Raleigh, S (1992). Suicide levels and trends among immigrants in England and Wales. *Health Trends* 24 91-94.

⁵³ MIND (2007). *Suicide rates, risks and prevention strategies* [Online] Available at

<http://www.mind.org.uk/Information/Factsheets/Suicide/Suicide+rates+risks+and+prevention+strategies.htm>

⁵⁴ Department of Health (2002). *National Suicide Prevention Strategy for England*. Department of Health. London. Available at http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4009474

⁵⁵ Kapur, N, Turnbull, P, Hawton, K, Simkin, S, Sutton, L, Mackway-Jones, K, Bennewith, O & Gunnel, D (2005). Self-poisoning suicides in England: a multi-centre study. *Quarterly Journal of Medicine* 98 589-597.

⁵⁶ Hawton, K & Fagg, J (1998). Suicide and other causes of death following attempted suicide. *British Journal of Psychiatry* 152 359-366.

⁵⁷ Davis, AT & Schrueder, C (1990). The prediction of suicide. *Medical Journal of Australia* 153 552-554.

⁵⁸ O'Donnell, I & Farmer, RDT (1994). The epidemiology of suicide on the London Underground. *Social Sciences Medicine* 38 409-418

⁵⁹ O'Donnell, I & Farmer, RDT (1994). The epidemiology of suicide on the London Underground. *Social Sciences Medicine* 38 409-418