# **Suicide Trends and Risk Factors**

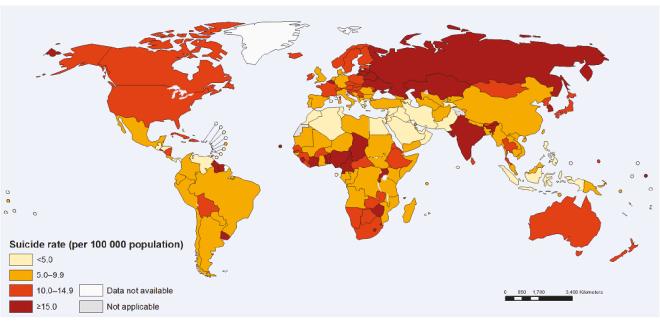
This article provides an update on recent population suicide trends and highlights factors associated with an increased risk of suicide.

### **Suicide Trends**

# **Facts and figures**

Around 800,000 people commit suicide every year<sup>1</sup> – one person every 40 seconds. Suicide has a profound impact on family and friends that are left behind following the unexpected death of a loved one. From a financial point of view, the cost of suicide to society is significant in terms of lost productivity and income, and the life insurance industry annually pays out millions for suicide claims.

When considering suicide population, rates results can vary quite noticeably by country, gender and age. What is clear, though, is that it remains a significant contributor to cause of death with an annually increasing trend in many countries. In this article we focus on three countries only – the United States, the United Kingdom and Australia.



Source: World Health Organization

S

## U.S.

In 2017 the National Center for Health Statistics published a report with a special feature on Mortality in which it is evident that suicides, together with unintentional injuries, are among the top 10 causes of death for both males and females across most age groups.<sup>2</sup> Unintentional injuries include accidental drug overdose and the opioid crisis, which has been well defined and discussed in previous articles.<sup>3</sup> The relevance of this is to consider that suicide rates may be underreported in view of some of the classifications of causes and manner of death.

Focusing on a subset of the general population that will closely reflect the insured population (age groups 25-44 and 45-64), the following key results should be noted:



# SUICIDE IS THE 3<sup>RD</sup> LEADING CAUSE OF DEATH

1<sup>st</sup> Unintentional Injuries 2<sup>nd</sup> Cancer 4<sup>th</sup> Heart Disease SUICIDE RATES ARE INCREASING STEADILY

By an average of 1.7% per annum during 2006–2016

2006–2016 INCREASE IN SUICIDE RATE PER ANNUM:





# UNINTENTIONAL INJURIES

Remained stable during 2006–2013 but increased an average of 12.4% during 2013–2016



# AGE GROUP 45–64 YEARS

# SUICIDE IS THE 8<sup>TH</sup> LEADING CAUSE OF DEATH

The three leading causes were Cancer, Heart Disease and Unintentional Injuries

with an average increase of 6.5% per annum durring 2013–2016



Suicide rates increased by an average of 4.2% for males during 2006–2010 and remained stable thereafter



Female suicide rates in this age group increased by 2.8%

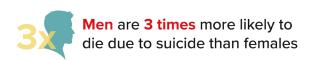
# UK

Data from the Office for National Statistics (ONS) shows a different picture to the annually increasing trend described for the U.S. In the UK, following an upward trajectory in 2009 – 2010, suicide rates have been decreasing since the end of 2014. However, suicide remains a top cause of death in some age groups, and according to the 2018 Samaritans' Suicide Statistics Report every day in Britain 17 people die of suicide.<sup>4</sup>



SUICIDE IS THE TOP LEADING CAUSE OF DEATH FOR BOTH MALES AND FEMALES







CAUSE OF DEATH FOR MALES
AND 4<sup>TH</sup> FOR FEMALES





**SUICIDE** DOES <u>NOT</u> APPEAR IN THE TOP 5 CAUSES OF DEATH

ഗ

### **Australia**

In 2017 the Australian Bureau of Statistics reported that suicide was the 13th leading cause of death, moving from 15th position in 2016 with an annual rise of 9.1%.5 The male-to-female ratio is similar to that of the UK, and the higher rate in certain age groups as we have already noted for both the U.S. and UK applies.



# AGE GROUP **15–44** YEARS

# **SUICIDE IS THE LEADING CAUSE** OF DEATH

Number and rate of suicides varies significantly between males and females; age distribution is similar





SUICIDE IS THE 2<sup>ND</sup> LEADING **CAUSE** OF DEATH

2017: 80% of suicides had related co-morbidities:

Drug & Alcohol Disorders

#### **Risk Factors**

# Adverse childhood experiences (ACE)

Some of the factors associated with an increased risk of suicide appear to be rather obvious, but others – such as ACEs and their impact on health in adulthood – may not be. ACEs are stressful or traumatic events, including abuse and neglect, that can be associated with the development and prevalence of a number of health problems. A study by the Centers for Disease Control and Prevention (CDC) in partnership with Kaiser Permanente found that an ACE in any category increased the risk of attempted suicide by two- to fivefold. Individuals who report six or more ACEs had a 24.36 times increased risk of attempting suicide.6

#### **Previous suicide attempts**

The Mayo Clinic followed nearly 1,500 Minnesota residents who had taken their first suicidal action and found that 82% of those who ultimately died by suicide did so within one year from their first attempt. People who followed up with psychiatric follow-up had a decrease of 80% in their suicidal behavior.7



# **MAYO CLINIC STUDY**

82% of those who ultimately died by suicide did so within one year of their 1st attempt

People that received psychiatric follow-up had an 80% reduction in their suicidal behavior



# Gender and relationship status

ONS data confirms that men are three times more at

risk of death from suicide than women, and this has been the case since 1990. Relationship breakdown can also contribute to suicide risk, and in 2015 divorced men were three times more likely to die from suicide than their peers in a marriage or civil partnership.

Ε

# Socio-economic deprivation

Those who live in an area where there is less access to services, employment and education are more at risk of suicide. People in the UK who live among the most deprived 10% of society are more than twice as likely to die from suicide as the least deprived 10%.

## Occupation

The ONS data also provides insights into occupations that are more at risk. Low-skilled workers, care givers and people working in the arts have a significantly higher risk of suicide. Males that work as skilled manual workers and females that work as nurses and nursery and primary school teachers have also been called out as higher risk. The lowest risk included occupations such as health professionals, those working in customer service or sales, and corporate managers and directors.

# **Summary**

Analysis of the recent population data (2016 and 2017) for two out of three countries reveals an upward trend in suicides, with suicide being in the top 10 causes of death in a number of age groups, especially those that resemble the insured population. The higher prevalence of suicide in males has been a constant observation for many years, and this most recent review confirms that this is still the case.

The decrease and stabilization of the United Kingdom suicide rate has been ascribed to the prevention efforts from government, the NHS, charities, and other groups. Our next article will include details on some of these programmes, including RGA's own initiative to be part of the prevention strategy for the UK. A better understanding of the factors that contribute to suicide informs many of these prevention efforts.

As claims professionals it is important that we have insight into the magnitude of suicide risk and that we do not lose sight of the human tragedy behind the evidence that is presented to us in the event of a claim.



Marilda Kotze
Global Head of Claims
RGA
mkotze@rgare.com

### References

- World Health Organization (WHO) Suicide Data https://www.who.int/mental\_health/prevention/suicide/suicideprevent/en/
- 2. National Center for Health Statistics (U.S.) <a href="https://www.cdc.gov/nchs/data/hus/hus17.pdf">https://www.cdc.gov/nchs/data/hus/hus17.pdf</a>
- 3. RGA Knowledge Center

  <a href="https://www.rgare.com/knowledge-center/media/articles/the-impact-of-the-opioid-crisis-on-claims">https://www.rgare.com/knowledge-center/media/articles/the-impact-of-the-opioid-crisis-on-claims</a>

  <a href="https://www.rgare.com/knowledge-center/media/articles/managing-the-opioid-epidemic-q-a-rose-opioid-use-disorder-case-management-guide">https://www.rgare.com/knowledge-center/media/articles/managing-the-opioid-epidemic-q-a-rose-opioid-use-disorder-case-management-guide</a>
- 4. Office of National Statistics (ONS) (UK)
  <a href="https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/whoismostatriskofsuicide/2017-09-07">https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/whoismostatriskofsuicide/2017-09-07</a>
- 5. Australian Bureau of Statistics <a href="http://www.abs.gov.au/ausstats/abs@.nsf/mf/3303.0">http://www.abs.gov.au/ausstats/abs@.nsf/mf/3303.0</a>
- 6. ACE (Adverse Childhood Experiences)
  <a href="https://www.samhsa.gov/capt/practicing-effective-prevention/prevention-behavioral-health/adverse-childhood-experiences">https://www.samhsa.gov/capt/practicing-effective-prevention/prevention-behavioral-health/adverse-childhood-experiences</a>
- 7. Previous Suicide Attempts <a href="https://ajp.psychiatryonline.org/doi/10.1176/appi.ajp.2016.15070854#T3">https://ajp.psychiatryonline.org/doi/10.1176/appi.ajp.2016.15070854#T3</a>