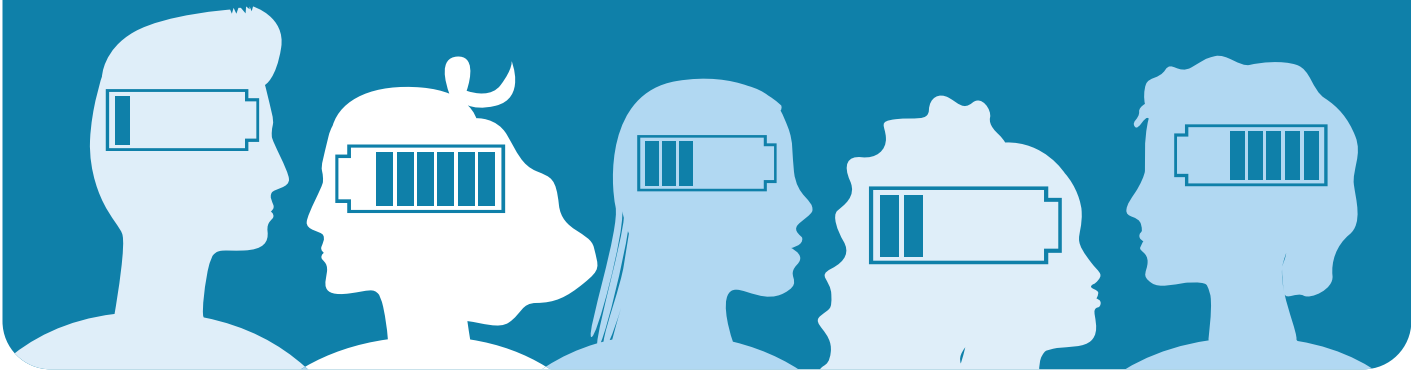


Expert Views

Managing Suicide and Mental Health Risks for Life Insurance

SCOR
The Art & Science of Risk

May 2023



Contents

Introduction: Mental Health Matters.....	3
Importance of Managing Suicide and Mental Health Risk for the Insurance Industry.....	3
Suicide Claims Experience Analysis.....	5
Underwriting Mental Health Risks.....	7
Potential Areas for Improvement.....	9



Introduction: Mental Health Matters

Suicide and mental health issues are global health epidemics. Unfortunately, unlike many other diseases, we have not yet found an effective solution for cure or prevention. Each year, over 750,000 people die by suicide around the world¹. Since the onset of the pandemic, the numbers have risen in many regions of the world, including the US², the UK³, South Africa⁴, South Korea⁵, and Japan⁶. This concerning upward trend of suicide rate is likely to remain as mental health issues are expected to have a long-lasting negative effect on the world population for years to come.

But the real cost of suicide is far more than the number of casualties. It also affects families and related people who are suffering from the death of their loved ones. Insurers help those who are left behind by providing them with financial support. But is there anything more we can do? Can we contribute, for example, not only by reducing the financial burden of the family who are left behind after the tragic incident but also by mitigating the suicide risk of the policyholders? Could we, for example, proactively detect any early warning signs when they apply for life insurance or even during the duration of their policy?

Let us share a real-life example. Just over two years after taking out a fully underwritten life insurance policy, we received a claim from a 31-year-old male farmer, who we will call John. John had sadly died by suicide. While expressing our deepest sympathy to his family and loved ones, we checked his disclosures in the application form he submitted just over two years earlier. We noticed that he had made no mental health disclosures. He did not tick “yes” to having a history of depression nor to having a diagnosed mental illness. This case isn’t unique. We have seen numerous cases of suicide claims with no mental health disclosures at the application stage. It is possible that these policyholders, like John, started to suffer from mental illnesses after their insurance policy coverage came into effect. But for John’s case, in retrospect, we wondered if there weren’t already signs of his mental vulnerability when the policy was taken out. And if there were signs, would the questions on the application form have been effective in enabling him to disclose his mental health condition honestly?

This article discusses current global trends in suicide and mental health issues and their significant effect on the life insurance industry. We will share our analysis of the suicide experience in life insurance policies and look at some examples of the medical underwriting in place for suicide risk, exploring where we could look to make meaningful changes and offering suggestions for improvement.





Importance of Managing Suicide and Mental Health Risk for the Insurance Industry

Starting with the why, let us discuss why understanding and managing suicide and mental health risks are an increasingly important topic for the life and health insurance industry. The Emerging Risks Initiative (ERI) Working Group at the CRO Forum, a group of risk managers and Chief Risk Officers from large multi-national insurance and reinsurance companies, rated the impact of mental health on different lines of business as a medium-risk item, with the first significant impacts expected within one to five years. In addition, the CRO Forum released a paper in 2021 that declares mental health a major social issue⁷. According to the paper, mental health conditions are the main cause of disability and early retirement in many countries and a major burden to economies, costing trillions of dollars each year.

When we say “mental health”, what exactly do we mean? The World Health Organisation (WHO) describes mental health as a state of wellbeing in which an individual realizes their own abilities, can cope with the normal stressors of life, can work productively, and is able to contribute to their community. Anyone whose state of mind prevents them from functioning as such would, by definition, lack good mental health.

What about “mental illness” or “mental disorders”? The definition of mental illness is not as clear as other diseases. American Psychiatric Association defines mental illness as “health conditions involving changes in emotion, thinking or behaviour, or a combination of these.” WHO defines mental disorders as “a clinically significant disturbance in an individual’s cognition, emotional regulation, or behavior.” Currently, however, there is no widely acknowledged clinical definition of mental health problems, which lie in the middle of the continuum between mental wellbeing and mental illnesses. Sometimes the practical distinction between mental health problems and mental illnesses or mental disorders can be blurred. In an insurance context, this can cause a wide range of challenges for the industry.

The impact of poor mental health, in terms of insurance claims, affects numerous product lines including disability insurance, life insurance, funeral insurance, credit life, etc. For disability insurance alone, global life and health insurers are paying up to \$15 billion a year in mental health-related claims, according to a study by the Geneva Association⁸.

In the general population, suicide accounts for 1.3% of all deaths globally, according to WHO’s 2019 data⁹. Global statistics on total insurance claims caused by suicide are not available, but the 2018 insurer claims statistics in South Africa show that suicide claims can be between 2.5% and 7% of retail death claims paid. In the Australian market, where suicide claims are generally payable from the 14th month for both group and retail business, SCOR’s analysis of the cause of death of claims relating to the Australian group insurance market found that suicide claims between 2005 and 2017 were between 7% and 10% of group death claims paid.

These are a significant proportion of claims, given that retail insurance policies only pay suicide claims from year two or three onwards, depending on the market and individual company. For many group risk providers around the world, there is no suicide exclusion clause, exposing them to a higher risk. In many markets, suicide claims in insurance portfolios dropped during the height of the COVID-19 pandemic but have started increasing again.

The effect of the rising trend of mental illness cases can be large and complex as it tends to be longer term and more unpredictable. For disability benefits, for example, we see that claims due to mental health problems are paid longer than other claim causes, causing more expenses for insurers.

It often requires a delicate balance when trying to rehabilitate these claimants with mental illness back into their work. While issues at work often



trigger mental illness in the first place, going back to work can also play a positive role in the patient’s recovery process. There are numerous studies supporting this point, showing evidence that working can give a sense of purpose, which can aid mental health illness recovery tremendously.

There is further evidence to show that mental health issues are becoming increasingly significant to the insurance business, especially since the onset of the pandemic¹⁰. Disability-adjusted life-years (DALYs) is a measure of overall disease burden, expressed as the number of years lost due to ill-health, disability, or early death. In 2020, the WHO listed depression as the 12th leading cause of DALYs for 2019, moving up from 16th in 2000¹¹.

Depression now accounts for more DALYs than HIV/AIDS globally and may soon exceed tuberculosis (ranked 9th). Depression is listed as a subset of the overall mental and substance use disorders group, making up just under 30% of the total DALYs of the group. Other causes listed in this group are conditions such as anxiety disorders, schizophrenia, and bipolar disorder. As such, poor mental health makes up a considerable proportion of the overall DALYs.

From an insurance perspective, we see the same trend – mental health issues are becoming more and more significant in our business. Here at SCOR, for example, we see that depression impairments are globally the most consulted impairments in SOLEM, our underwriting manual.

Suicide Claims Experience Analysis

Let us bring our focus to actual suicide insurance claims experience. When we analyzed the incidence of claims over the duration of the policy, we saw unexpected trends in experience for suicide death claims, especially after the suicide clause period expired.

What exactly does a suicide clause include? For fully underwritten retail policies, many insurers around the world have a suicide clause, which specifies that if an insured dies by suicide during the period of the suicide clause, the total insured face amount is not paid. The length of this clause coverage varies by company and country, but it is typically for the first one to two years from the commencement of the policy (See Table 1). In countries like Germany and South Korea, it is as long as three years. Although the length differs, this clause should provide insurers some protection against adverse selection, whereby applicants take out life insurance with the intention of dying by suicide.

Table 1: Typical Suicide Exclusion Period by Country

Country	Typical Suicide Exclusion Clause Period
UK	1 Year
Spain	1 Year
Hong Kong	1 Year
India	1 Year
Indonesia	1 Year
Malaysia	1 Year
Singapore	1 Year
Taiwan	1 Year
Thailand	1 Year
Vietnam	1 Year
Australia / New Zealand	13 Months
Japan	2 Years
United States / Canada	2 Years
South Africa	2 Years
China	2 Years
South Korea	3 Years
Germany	3 Years

**This is based on our internal survey and does not represent any regulations or statistical data.*



To see if this clause effectively served the initial purpose, i.e., minimizing the insureds' suicide risks, we developed a model chart, shown in Figure 1, using a sample of South African fully underwritten insurance data, we show the trend of the age-standardized suicide death claims incidence. First, we drew an expected shape (shown in the dotted line in the upper-right box in Figure 1) and compared it with the actual result. As you can see, we found a significant difference between the expected curve and the actual result. We initially expected underwriting to have a positive impact in those policies. As insureds have recently undergone medical tests including medical health evaluations and been properly underwritten, they should have lower claims incidence than equivalent policies which were underwritten some time ago. As the policies remain in force over time, the general health of the policyholders tends to decline, and the claims incidence increases to the same levels of equivalent 'older' policies. All else being equal, this should lead to lower suicide claims incidence levels at earlier durations, and then a levelling out of the claim incidence at the longer-term durations. That was our initial hypothesis, the expected shape.

But, when we compared it with the actual experience, our hypothesis proved wrong. Contrary to our assumption, the suicide incidence

is the highest in the first year in which claims become payable. The incidence then decreases by duration and eventually levels out at a lower level. This fact leads us to believe that the industry isn't underwriting suicide risk effectively. Other studies covering previous years also found that suicide incidence rates and percentage rose significantly after the contestable period (a period during which the insurer can investigate the application for fraud and misrepresentation and consequently deny a claim for death benefits) indicating that insured possibly intentionally postponed the act of suicide until the contestable period passed¹².

There is an additional point to consider when we try to grasp the entire picture. Suicide claims could be underestimated if we only look at the cases that are officially marked as suicide. There is a theory that some accidental claims, especially early on in insurance policies, are suicide claims masked as accidental claims. To decline the claim in the first two years, the burden of proof lies with the insurer to prove that the death was by suicide. This can be extremely difficult to do.

Accidental events are random, and medical underwriting could have a limited impact on screening for poorer risks. Given this, we could expect a slightly lower accidental incidence for a few years after underwriting, with the age-standardized incidence leveling out over time.

Figure 1: Trend of the age-standardized suicide death claims incidence of an insured population

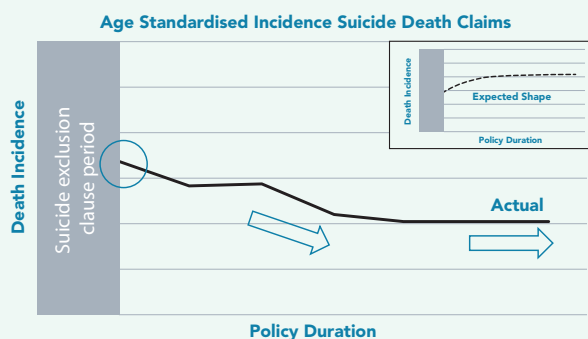
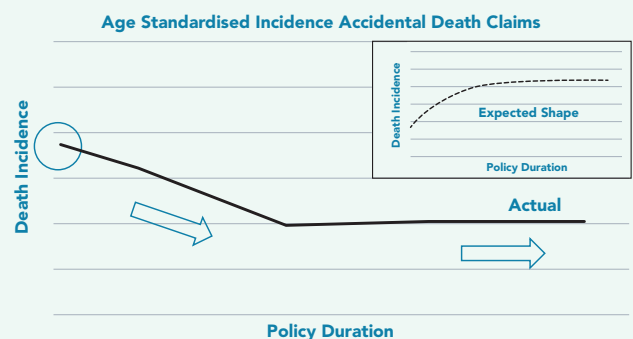


Figure 2: Trend of the age-standardized accidental death claims incidence of an insured population





However, when we analyze the accidental death claims incidence in the same market, the experience of the fully underwritten insurance population tells a very different story. As shown in Figure 2, it demonstrates more of a decreasing trend over a few years, with the incidence then leveling out. The highest incidence is often

found to be in the first year of the policy. There certainly seems to be a concern with the current underwriting process, and it looks like planned anti-selection could be happening in insurance portfolios. This is an example in South Africa but could also be observed in other markets.

Underwriting Mental Health Risks

The discrepancy between the prediction and reality of effectively predicting applicants' mental health risks, as we have just described, explains how difficult the task is despite life insurers' ongoing efforts. Today's life insurance underwriting process integrates many health-related factors of the applicants, such as medical history, age, gender, and others.

Underwriting for mental health conditions, however, is more challenging, as there are often fewer quantifiable links with lifestyle factors as compared to other conditions. For example, when assessing cardiovascular risk, there is a clear quantifiable link with several lifestyle factors, such as obesity or smoking. Evaluating mental health risks, on the other hand, is more difficult as it requires complex and often unquantifiable factors.

From a medical underwriting perspective, there are numerous risk factors influencing suicide risk that could be included in an application questionnaire set. Understanding applicants' financial stress, history of mental health conditions, previous suicide attempts, and family history of suicide could be included in the underwriting process.

How do life insurers currently collect applicants' information on mental illness issues during the underwriting process? According to our research, many insurers' application forms ask some type of question on mental illness. They often start by asking if the applicant has a history of mental health conditions such as stress, anxiety, depression, and post-traumatic stress disorder (PTSD). If the applicant says yes to those questions, they

will go further and ask for more specific health conditions, such as:

- Depression, PTSD, post-natal depression, burn-out, or other mood or depressive disorder
- Attention deficit disorder, eating disorder, obsessive compulsive disorder, or other anxiety disorder
- Schizophrenia, psychotic, or other personality disorder
- Chronic fatigue syndrome, chronic pain syndrome, fibrositis, or other muscle pain or tiredness
- Insomnia, sleep disorder, fatigue, or other stress-related difficulties
- Panic attacks or other psychiatric disorders

Some companies ask about these symptoms for a specific period such as "in the last five years". If an applicant answers yes to such a question, a more comprehensive mental health questionnaire will be sent to be filled out. Some companies, go further and ask if applicants have ever had any suicidal thoughts or attempts, or have been admitted to hospital. Based on the answers to this questionnaire, the applicant will be offered terms relevant to their circumstances, if possible.

The current process and forms for evaluating suicide risks of applicants are not perfect and have many areas for improvement. For example, on reviewing the underwriting questions on mental illness by many companies in various markets, we found that inquiries about applicants' depression, anxiety, and stress are often included together with severe neurological or nervous system disorders



such as epilepsy. If we structure application forms in this way, it could confuse the applicants as to what disclosure the insurer intends. If, for example, an applicant has mild symptoms of depression, but depression is listed together with brain disorders or epilepsy, the applicant might not disclose their mild depression.

Do you need more evidence to be convinced? Take the statistics which suggest that one in four people suffer from a mental health issue every year¹³. If we compare this 25% to a large sample of completed application forms, we found that only 10% of applications disclosed a mental health concern. This is far less than the one-in-four.

Driven by the ongoing advanced technology and research on mental health, we have seen significant progress in the field of mental health underwriting in recent years. For example, innovative biometric risk calculators, such as SCOR's Vitae Mental Health calculator, are being launched, enabling more accurate risk assessment based on a wider array of medical factors. The benefits include underwriting process simplification, better end-customer experiences, and fairer pricing decisions.

Even though they are beneficial tools for underwriting mental health risks, these calculators still face challenges as they rely heavily on comprehensive and accurate disclosures from applicants. There is a persistent stigma around mental health conditions, which may impact the disclosures we receive through the underwriting application process.

In ReMark's 2021–2022 Global Consumer Study (GCS), one of the largest global surveys on life insurance consumers in the world conducted by ReMark Group, a SCOR company, 70% of respondents globally noted that they feel there is a stigma around mental health disorders in society today. As we saw with John's case, which we shared previously, there are numerous cases of suicide claims where there were no mental health disclosures at the application stage.

When we examine medical underwriting practices in various global markets, we often see a lower level of mental health disclosures on application forms than expected. This could be due to applicants not feeling comfortable disclosing mental health problems, especially if an intermediary is involved in the process. Or perhaps the application forms themselves aren't clear enough in the questions being asked, leading to more innocent non-disclosure.

If we look at a history of mental health conditions and medical research, statistics show that 90% of people who died by suicide are thought to have had a diagnosable mental health condition prior to their death. This fact indicates that if life insurers get clear and honest disclosures from applicants during the medical underwriting process, it should enable more accurate underwriting and proper risk assessments. It will not only lower insurers' risk of providing insufficient risk assessment on applicants but could also help applicants who are yet to be diagnosed with potential mental health issues.



Potential Areas for Improvement

Even though most insurance application forms we observed have a question on mental illness in some form or another, we still see mental health disclosures at levels far lower than we would expect, and we believe there is room to improve the underwriting process to get better disclosures.

What can we do to improve the current situation? There are many possible options. For example, behavioral economics-based techniques can be very useful in this regard to help structure questions optimally. This will ensure that we not only ask the right questions but also ask them in the best way. Below are some recommendations:

- 1. Simplify the list:** Long lists of mental health conditions that applicants face during the underwriting process produce cognitive overload and fatigue, raising the risk of applicants skimming the list and overlooking applicable conditions.
- 2. Group the conditions strategically:** Applicants can be put off from disclosing a mild mental health issue (stress, anxiety, etc.) when the issue is grouped with other more serious or stigmatized conditions such as bipolar disorder, schizophrenia, PTSD, etc.
- 3. De-stigmatize language:** Some applicants may find certain language around mental health issues stigmatizing. Insurers need to be mindful and avoid using any language that could make applicants feel ashamed or guilty for their mental health challenges.
- 4. Mind social norms:** Choose the language and tone of voice conveying the message that mental health issues are very common and accepted in society. Do not make applicants feel they are breaking social norms.
- 5. Build trust:** Mental health issues can be highly private and challenging experiences of a person's life. Insurers must earn applicants' trust by assuring them that all the information provided will be strictly confidential and purposefully used.

How would we assess suicide or mental health risks of applicants with yet-to-be diagnosed mental health issues in the life insurance process? For suicide risk, we would be looking to understand the clinical symptoms that could relate to this particular risk. Some examples include feelings of hopelessness and being tired all the time. Currently, not all the insurance application forms around the globe we have seen have specific questions relating to understanding these clinical symptoms. This is an area we could explore further for improvements.

For those yet to be diagnosed with a mental health condition, we should search for ways to have an effective question which looks more at clinical symptoms. If symptoms are revealed, this could trigger some form of comprehensive future vulnerability questionnaire, which may be especially helpful since mental health is still so stigmatized.

Another suggestion is to add a question related to the applicants' suicide attempt history, if not already included and if not prohibited by regulation. The most influential and obvious risk factor for suicide is a previous suicide attempt. When assessing application forms, we noticed that in some markets, application forms do not ask a question relating directly to a history of a suicide attempt. This is quite unexpected, as many applicants with prior suicide attempts may not have received treatment or been diagnosed with a mental illness. As such, the current process could completely miss this disclosure if it isn't being asked directly. This has, of course, a high level of sensitivity and insurers need to approach with the highest level of caution and respect to applicants as well as local cultural and regulatory issues.



Conclusion

Mental health is a rapidly growing critical topic for the insurance industry, and the evidence is clear: suicide risk is a significant driver in today's insurance claims experience, and it needs to be properly addressed. Based on the trends in mental health and the analysis of the suicide incidence experience over the policies' duration, we believe that the underwriting process could be improved to assess mental health and suicide risks much better.

Providing applicants with a smooth customer journey is a central aspect of the life insurance application design process, and we need to strike a balance between the effectiveness of the questions and the length of time it takes a customer to complete the application form.

As insurers, we want to be in a position where we encourage better disclosures of mental health questions, so we can provide the most appropriate insurance coverage to our clients. To do so, we will need to take account of the stigma around mental health and have a more open and transparent dialogue around mental health and suicide risks with applicants through improved underwriting questions. After all, we can't expect applicants to disclose something that we haven't asked them about. In the end, as Edward Hodnett, a 20th-century poet and writer, said, "If you don't ask the right questions, you do not get the right answers."

Endnotes

1. Dattani, S., Rodés-Guirao, L., Ritchie, H., Roser, M., & Ortiz-Ospina, E. (2023). Suicides. Our World in Data. <https://ourworldindata.org/suicide>
2. Nasir, R., John, E., & Mais, D. (2022, September 5). Suicides in England and Wales - office for national statistics. Gov.uk; Office for National Statistics. <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/suicidesintheunitedkingdom/2021registrations>
3. Suicide increases in 2021 after two years of decline. (2022, September 27). Cdc.gov. https://www.cdc.gov/nchs/pressroom/nchs_press_releases/2022/20220930.htm
4. Motsoari, C. (2021, October 5). Suicide crisis soars in South Africa. The Mail & Guardian. <https://mg.co.za/thoughtleader/opinion/2021-10-05-suicide-crisis-soars-in-south-africa/>
5. ET Spotlight Special. (2022, September 27). Suicide rate in Korea rises, highest among developed countries. Here's why. Economic Times. <https://economictimes.indiatimes.com/news/international/us/suicide-rate-in-korea-rises-highest-among-developed-countries-heres-why/articleshow/94479324.cms?from=mdr>
6. Suicides in Japan increase in 2022, with first rise among men in 13 years. (2023, January 20). The Japan Times. <https://www.japantimes.co.jp/news/2023/01/20/national/suicide-japan-rise/>
7. CRO Forum. (2021, December 22). Mental health - the hidden crisis. The CRO Forum. <https://www.thecroforum.org/mental-health-the-hidden-crisis/>
8. ET Spotlight Special. (2022, September 27). Suicide rate in Korea rises, highest among developed countries. Here's why. Economic Times. <https://economictimes.indiatimes.com/news/international/us/suicide-rate-in-korea-rises-highest-among-developed-countries-heres-why/articleshow/94479324.cms?from=mdr>
9. (N.d.). Nih.gov. Retrieved May 17, 2023, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9476842/#:~:text=Suicides%20present%20a%20significant%20burden,death%20in%202019%5B4%5D>.
10. (N.d.-b). Thelancet.com. Retrieved May 17, 2023, from [https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370\(22\)00303-0/fulltext](https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370(22)00303-0/fulltext)
11. Global health estimates: Leading causes of DALYs. (n.d.). Who.int. Retrieved May 17, 2023, from <https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/global-health-estimates-leading-causes-of-dalys>
12. RGA. Suicide: Global Insights and Insurance Analysis http://extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.rgare.com/docs/default-source/default-document-library/suicide---global-insights-and-insurance-analysis.pdf?sfvrsn=38bad888_0
13. The World Health Report 2001: Mental Disorders affect one in four people. (n.d.). Who.int. Retrieved May 17, 2023, from <https://www.who.int/news/item/28-09-2001-the-world-health-report-2001-mental-disorders-affect-one-in-four-people>

This article was written by:



Brice Salence

Head of Actuarial
Life Underwriting South Africa
bsalence@scor.com

Please feel free to visit us at [scor.com](https://www.scor.com)

SCOR SE
5 avenue Kléber - 75795 PARIS Cedex 16
France

SCOR
The Art & Science of Risk

May 2023

No part of this publication may be reproduced in any form without the prior permission of the publisher. SCOR has made all reasonable efforts to ensure that information provided through its publications is accurate at the time of inclusion and accepts no liability for inaccuracies or omissions. Photo credit: © Adobe Stock