Using Empirical Data on the Widowhood Effect to Optimize Simultaneous Death Law and Drafting

Alyssa A. DiRusso*

Widowhood is dangerous. When a person loses a spouse, the risk of death and other adverse health consequences surges. This public health phenomenon, coined “the widowhood effect” or “broken heart syndrome” by researchers, has persisted over the course of centuries and has generated robust empirical data. Specifically, most research indicates that the increased risk to health and life is primarily a result of the stress of spousal death rather than common accident. Further, it establishes that although the increased risk of mortality can remain elevated for a lifetime, the peak timeframe of most heightened risk is in the six months following bereavement.

Compare this to the default law of simultaneous death. Most states have probate codes based on one of two versions of the Uniform Simultaneous Death Act. Under the newer version, an heir or beneficiary must survive a decedent for at least 120 hours in order to receive the property. Under the older version of the Act, an heir or beneficiary cannot receive property from a decedent’s estate if there is no sufficient evidence of survival. Although these rules provide some protection against redundant probate (and/or

* Copyright © 2020 Alyssa A. DiRusso. Alyssa A. DiRusso is the Whelan W. and Rosalie T. Palmer Professor of Law at Samford University’s Cumberland School of Law and an ACTEC Academic Fellow. She holds her J.D. from the University of Texas School of Law and her B.S. in Psychology from Carnegie Mellon University. She gratefully acknowledges the Cumberland School of Law for a summer research grant that supported work on this Article. She wishes to thank her excellent research assistant, Mallory Koger, her supportive colleagues who attended her Works in Progress presentation, and the organizers and participants in the ACTEC conference at the University of California, Davis, School of Law. She also thanks her husband Brian for not exposing her to the negative consequences of the widowhood effect; let’s keep it that way.
redirection of assets through a spouse’s estate) when a couple perishes by common accident, they map poorly onto the reality of why and when a widow or widower dies. Although there are some jointly encountered catastrophes causing two deaths in short order, the more common scenarios are deaths triggered by stress and grief during bereavement, such as cardiac disease, stroke, and other ailments exacerbated by extreme emotional stressors.

This Article argues that both the default rules of simultaneous death and related legal practice ought to take into account well-established multidisciplinary research on both the causes and the timing of deaths of spouses. Such an approach requires an expansion of the concept of near-simultaneous death of spouses to be measured not in hours, but in months. Many clients using dispositive documents will be served best by requiring a spouse to survive for six months in order to take, but lawyers can tailor these documents to individual needs. In the absence of governing documents, the default rule should track the wishes of the typical decedent. More research is necessary to confirm the author’s expectation that most spouses would rather property pass through their own estates than their spouse’s if the spouse falls prey to broken heart syndrome within the six months after death.

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I. PROLOGUE

Romeo:

Ah, dear Juliet,

Why art thou yet so fair? Shall I believe

That unsubstantial death is amorous,

And that the lean abhorred monster keeps
Thee here in dark to be his paramour?

For fear of that I will stay with thee

And never from this palace of dim night

Depart again. Here, here will I remain

With worms that are thy chambermaids. O, here

Will I set up my everlasting rest

And shake the yoke of inauspicious stars

From this world-wearied flesh! Eyes, look your last.

Arms, take your last embrace. And, lips, O, you

The doors of breath, seal with a righteous kiss

A dateless bargain to engrossing death.

Come, bitter conduct, come, unsavory guide!

Thou desperate pilot, now at once run on

The dashing rocks thy seasick weary bark!

Here’s to my love.

[Drinks.]

O true apothecary,

Thy drugs are quick. Thus with a kiss I die.¹

¹ WILLIAM SHAKESPEARE, ROMEO AND JULIET, act 5, sc. 3.
II. INTRODUCTION

George Herbert Walker Bush and Barbara “Babs” Bush hold the record, at 73 years, as the longest-married presidential couple. They both died in 2018, within eight months of each other. What George Senior and Babs share with Romeo and Juliet can be explained by empirical evidence on how widowhood exacerbates the risk of death of the surviving spouse.

Social science research establishes the existence of the “widowhood effect” or “broken heart syndrome” — the public health phenomenon of spousal health and death risks spiking following the death of a spouse. Love is tethered to grief and loss, with grief and loss often being bad for one’s health. Researchers have noted the increased risk of morbidity shortly after the death of a spouse, with health sometimes beginning to decline during a spouse’s final illness. The increased

3 See id.
4 Although sometimes used interchangeably in the literature, there is a technical difference between the “widowhood effect” and “broken heart syndrome.” The American Heart Association explains that the term “broken heart syndrome” means “stress-induced cardiomyopathy or takotsubo cardiomyopathy” — a heart condition caused by stress or grief distinguishable from a heart attack and less likely to be fatal. See Is Broken Heart Syndrome Real?, AM. HEART ASS’N, https://www.heart.org/en/health-topics/cardiomyopathy/what-is-cardiomyopathy-in-adults/is-broken-heart-syndrome-real (last visited Oct. 2, 2019) [https://perma.cc/2ESQ-48ST]. The BBC, citing the British Heart Foundation, concurs and describes broken heart syndrome as a change in heart shape as a result of stress or shock. See Stephen Evans, Can You Die from a Broken Heart?, BBC NEWS (Dec. 29, 2016), https://www.bbc.com/news/magazine-28736374 [https://perma.cc/T8S8-VEMM]. The left ventricle puffs out into the shape of a vessel used for catching octopi — hence the reference to the takotsubo octopus trap — and either returns to normal or prompts a fatal heart attack. See id. The widowhood effect, by contrast, is narrower in that it applies only to spouses, and broader in that it encompasses a wider variety of causes of death.
8 See Anusha M. Vable et al., Does the “Widowhood Effect” Precede Spousal Bereavement? Results from a Nationally Representative Sample of Older Adults, 23 AM. J. GERIATRIC PSYCHIATRY 283, 290 (2015).
mortality risk for a recently widowed spouse spans a wide range of ages, socioeconomic status, countries, and cultures. The literature on the widowhood effect is robust and convincing. It’s heartbreaking, too — not only do spouses suffer unimaginable grief at the loss, it quite literally kills them. Often (normally adult) children are left orphans because shortly after they lose one parent, they lose the other.

Particularly in such times of tragedy, the law of trusts and estates ought to be responsive to the realities surrounding death and loss. At its current state, however, the law of simultaneous death is no better than a tepid condolence card, divorced from reality or any genuine understanding. When trusts and estates law relies upon under-substantiated assumptions, it risks skewing distribution of property from the donor’s intent. Recent scholarship nudges the law in a better direction by integrating empirical research. Although original empirical research within legal scholarship is part of the solution, legal scholars should also use empirical data from complementary disciplines to inform law and policy. This Article seeks to bridge that gap with respect to spousal survivorship.

The widowhood effect itself has been documented for more than 150 years, with empirical research available for more than the past half-

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10 See Espinosa & Evans, supra note 9, at 1328.

11 Although most articles on the widowhood effect focus on death by natural causes following bereavement, survivors also face increased risk of suicide, like Romeo and Juliet. See Jason B. Luoma & Jane L. Pearson, Suicide and Marital Status in the United States, 1991-1996: Is Widowhood a Risk Factor?, 92 AM. J. PUB. HEALTH 1518, 1518 (2001) (noting that studies have shown that rates of suicide among widows and widowers are between eight and fifty times higher than the general population).

12 There are increased health risks associated with the stress of losing parents as well, which is discussed later in this Article. See infra Part III.A.


century.\textsuperscript{15} Although social scientists and public health scholars have produced rich statistical analyses relating to the widowhood effect, they have been broadly ignored in wealth transfer law.\textsuperscript{16} The goal of this Article is to assess how empirical data on the widowhood effect can better inform both the default law of simultaneous death and how lawyers draft for star-crossed lovers.

\section*{III. The Widowhood Effect}

This Part will discuss the depth and breadth of social science and public health literature on the widowhood effect.\textsuperscript{17} First, it will explain the widowhood effect and how demographic characteristics can predict its impact. Next, it will discuss the predominant theories for why the widowhood effect exists. Finally, it will examine timing implications of the widowhood effect, which will lead into a consideration of how well the law of simultaneous death maps onto the timing of bereavement mortality risks.\textsuperscript{18}

Sociologists and demographers have extensively examined\textsuperscript{19} the effect of marital status on mortality and health since the nineteenth century.\textsuperscript{20} Not only has the widowhood effect proven to be a persistent public health phenomenon, there is some indication that the risk of mortality associated with widowhood has slowly increased over time, with

\textsuperscript{15} The first statistical analysis of the widowhood effect was performed by Young et al. in 1963. See Thierry, supra note 9, at 85.

\textsuperscript{16} Legal scholarship has identified the widowhood effect as a condition that affects elders in our society; see Laurence C. Nolan, \textit{Dimensions of Aging and Belonging for the Older Person and the Effects of Ageism}, 25 BYU J. PUB. L. 317, 326 (2011) (“The increased likelihood for a recently widowed person to die — often called the ‘widowhood effect’ — is one of the best documented examples of the effect of social relations on health.” (citing Elwert & Christakis, \textit{The Effect of Widowhood}, supra note 9, at 2092 n.71)); but there do not appear to be any publications that recommend adjusting simultaneous death rules based on this phenomenon.

\textsuperscript{17} For convenience, this Article uses the term “widow” to be gender-neutral except when explicitly noted, rather than repeating “widow or widower” to mean any surviving spouse.

\textsuperscript{18} Spoiler alert: it doesn’t.

\textsuperscript{19} To be fair, the volume of research on the widowhood effect is so extensive that this Article provides only a relatively small sampling. A search for the term “widowhood effect” in the PubMed database managed by the National Institutes of Health returns over 190 published studies. \textit{See Search Results: “Widowhood Effect,”} NCBI, https://www.ncbi.nlm.nih.gov/pubmed/?term=widowhood+effect (last visited Oct. 2, 2019) [https://perma.cc/4RVF-E7ND].

modern spouses at higher risk than previous generations. As the discussion will show, there is wide agreement that the phenomenon is clearly documented, but inconsistent as to what extent demographic characteristics affect risk. Key to legal default rules and drafting considerations is the timing of the widowhood effect — the window of time during which the risk of death from bereavement peaks.

It is important to note at the outset that deaths attributable to the widowhood effect generally are by natural causes. These are not deaths caused by family members perishing in a jointly encountered disaster like a car crash. Although that can sometimes happen, studies of the widowhood effect generally entail holding the status of widow for at least long enough to be enrolled as a subject.

A. Defining the Widowhood Effect and Its Victims

Widowhood can be lethal. Over the course of many decades of research, studies have associated widowhood with worse health as it impacts mental, cognitive, and functional health, which leads to excess mortality rates for almost all causes of death. Even the time leading up to the death of a spouse triggers worse health outcomes as widows are prone to declining well-being and abilities prior to the loss of a spouse. Although studies indicate the health and mortality consequences of widowhood affect surviving spouses across a wide

21 See id. at 598.

22 See A. Prior et al., Bereavement, Multimorbidity and Mortality: A Population-Based Study Using Bereavement as an Indicator of Mental Stress, 48 PSYCHOL. MED. 1437, 1439 (2018) (noting that excess mortality resulted primarily from natural causes).

23 See Vable et al., supra note 8, at 289.

24 See Pekka Martikainen & Tapani Valkonen, Mortality After the Death of a Spouse: Rates and Causes of Death in a Large Finnish Cohort, 86 AM. J. PUB. HEALTH, 1087, 1091 (1996) [hereinafter Rates and Causes of Death in a Large Finnish Cohort]. A feature article published by the American Psychological Association promoted personalized counseling in the wake of spousal loss, noting that 40% of survivors experience generalized anxiety or panic attacks and that the risk of death increases 40-70% compared to the general population. See Karen Kersting, A New Approach to Complicated Grief, 35 MONITOR ON PSYCH. 51, 51 (2004).

25 See Vable et al., supra note 8, at 290. They found changes in mobility, elevated depressive symptoms, and worse word recall in widows prior to the death of their spouse, “suggesting that at least some portion of the ‘widowhood effect’ is not causally related to widowhood per se.” Id. at 289.
range of demographic backgrounds, certain factors like sex, age, and socioeconomic status may moderate or exacerbate the risks.

Researchers have repeatedly identified the deadly connection between bereavement and increased risk of negative health outcomes. In a classic study on the broken heart syndrome, Parkes et al. suggested that the increase in mortality following widowhood was comprised mostly of an increase in deaths from heart disease, finding that coronary thrombosis and other heart diseases accounted for 53% of the total increase in mortality. In *The Effect of Widowhood on Mortality by the Causes of Death of Both Spouses*, Felix Elwert and Nicholas A. Christakis explained that widowhood increases the risk for some causes of death more than others. For example, widowhood increased the surviving spouse’s hazards of death from accidents, serious fractures, chronic obstructive pulmonary disorder (“COPD”), and lung cancer by more than 20%, but the risk of congestive heart failure, nephritis or kidney disease, and other heart and vascular diseases is only increased by about 10%. The research is therefore mixed as to which causes of death may be exacerbated by widowhood, but most researchers believe some causes of death may be heightened more than others.

Spouses of either sex face health and mortality risks in widowhood, but there is substantial consensus in the research that the burden is greater for men than for women. Looking at the outcomes of many studies, researchers Pekka Martikainen and Tapani Valkonen noted that the widowhood effect has been found to cause an average of 17% excess...

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26 See sources cited supra note 9.

27 See Elwert & Christakis, *Widowhood and Race*, supra note 5, at 17 (asserting that there are race differences in the widowhood effect as well, but noting that prior studies have not found conclusive differences based on race).


29 See Elwert & Christakis, *The Effect of Widowhood*, supra note 9, at 2097. The study notes that the preceding spouse’s cause of death can affect the size of the widowhood effect’s impact on the surviving spouse. See id. at 2095. For example, if a wife died of lung cancer, COPD, other heart or vascular diseases, or diabetes, men’s overall hazard of death increased by 20%, but men’s overall hazard of death was lower than 20% if their wife died of any other causes. See id.

30 See id. at 2094-95.

31 See id.

32 See J. Robin Moon et al., *Widowhood and Mortality: A Meta-Analysis*, 6 PLoS ONE 1, 4 (2011) [hereinafter *Widowhood and Mortality 2011*] (finding a difference in the magnitude of the widowhood effect by gender); Shor et al., * supra note 20, at 598 (finding that men had an average increased risk of 27% and women had an average increased risk of 15%); Thierry, * supra note 9, at 90 (finding that mortality within the first year of widowhood is more pronounced for men than for women).
mortality for men, but only an average of 6% excess mortality for women.\textsuperscript{33} Scholars have theorized several explanations for this gender gap, including that men depend more on their wives to maintain social networks, depend more on women for care and support through household tasks, may be more likely to take up unhealthy habits, or are worse at coping with stressful life events.\textsuperscript{34} Perhaps because same-sex marriage was not recognized by the Supreme Court until 2015,\textsuperscript{35} there does not appear to be significant research on whether sex-linked risks remain elevated in these marriages.

Living in an urban rather than rural community may also affect the negative health impacts of widowhood, at least for men.\textsuperscript{36} A 2015 study noted that although the initial impact of widowhood was much less pronounced for urban men compared to rural men,\textsuperscript{37} However throughout the later stages of widowhood, urban men remained at a higher risk of mortality than married couples, while the risk for rural men attenuated and disappeared after the first year.\textsuperscript{38}

Age is perhaps the demographic factor most closely associated with increased mortality risk, probably because baseline mortality risk for the young is much lower than for the elderly. Most studies have shown that widowhood at a younger age has a greater impact than at an older

\textsuperscript{33} See Pekka Martikainen & Tapani Valkonen, Mortality After Death of Spouse in Relation to Duration of Bereavement in Finland, 50 J. EPIDEMIOLOGY & COMMUNITY HEALTH 264, 268 (1996) [hereinafter Mortality in Relation to Bereavement in Finland].

\textsuperscript{34} See Martikainen & Valkonen, Rates and Causes of Death in a Large Finnish Cohort, supra note 24, at 1092. For the last theory, see Steel Magnolias Quotes, QUOTES.NET, https://www.quotes.net/mquote/1198022 (last visited Mar. 9, 2020) [https://perma.cc/7X3U-5QZS] (“M’Lynn: No.. I couldn’t leave my Shelby. I just sat there and kept pushin’ the way I always have where Shelby was concerned. . . . I was hopin’ she’d sit up and argue with me. Finally we realized there was no hope. They turned off the machines. [Pause] Drum left.. couldn’t take it. Jackson left. [slight laugh] I find it amusin’. men are supposed to be made outta steel or somethin. I just sat there. I just held Shelby’s hand. There was no noise. No tremble. Just peace. Oh God.. I realize as a woman how lucky I am! I was there when that wonderful creature drifted into my life.. and I was there when she drifted out of it. It was the most precious moment of my life . . . .”). Robert Harling is a graduate of Tulane University School of Law. See Robert Harling, DRAMATISTS, https://www.dramatists.com/dps/bios.aspx?authorbio=Robert+Harling (last visited July 10, 2019) [https://perma.cc/6F34-VYNB].


\textsuperscript{37} See id. at 72.

\textsuperscript{38} See id. at 71.
age. For example, researchers Dr. Martikainen and Dr. Volkonen found that excess mortality was highest among the youngest group in their sample (ages thirty-five to sixty-four), with an excess mortality of 70% for men and 25% for women, while in the oldest group (ages seventy-five to eighty-four), men only had excess mortality of 10%, with no excess mortality for women.\footnote{See Pasqualina Perrig-Chiello et al., \textit{Cohort and Gender Differences in Psychosocial Adjustment to Later-Life Widowhood}, 71 \textit{J. GERONTOLOGY} \textbf{765}, 772-73 (2016); Shor et al., \textit{supra} note 20, at 598; Thierry, \textit{supra} note 9, at 90-91.}

Although one might hope that initial good health protects a survivor from the widowhood effect, at least two studies have found that good health at the time of spousal bereavement actually leads to a greater impact on mortality compared to people with pre-existing or chronic illnesses.\footnote{See Martikainen & Valkonen, \textit{Rates and Causes of Death in a Large Finnish Cohort}, \textit{supra} note 24, at 1091.} In \textit{Do Good Health and Material Circumstances Protect Older People From the Increased Risk of Death After Bereavement?}, Shah et al. found that “at least in the early period of bereavement,” mortality risks generally stem from “acute or short-term events” rather than through worsening or development of chronic disease, so being healthy to start does not convey any substantial advantage.\footnote{See Paul J. Boyle et al., \textit{Does Widowhood Increase Mortality Risk? Testing for Selection Effects by Comparing Causes of Spousal Death}, 22 \textit{Epidemiology} \textbf{1}, 4 (2011); Sunil M. Shah et al., \textit{Do Good Health and Material Circumstances Protect Older People from the Increased Risk of Death After Bereavement?}, 176 \textit{Am. J. Epidemiology} \textbf{689}, 696 (2012) [hereinafter \textit{Do Good Health and Material Circumstances Protect}].} A 2016 study regarding pre-existing cardiovascular disease and its impact on the widowhood effect produced a similar result.\footnote{See Shah et al., \textit{Do Good Health and Material Circumstances Protect}, \textit{supra} note 41, at 696.} In \textit{Mortality After Bereavement: The Role of Cardiovascular Disease and Depression}, Dr. Stahl and her coauthors concluded that “good physical health does not protect individuals from mortality after bereavement.”\footnote{See Sarah T. Stahl et al., \textit{Mortality After Bereavement: The Role of Cardiovascular Disease and Depression}, 78 \textit{Psychosomatic Medicine} \textbf{697}, 701 (2016). Stahl et al. found that bereavement actually decreased mortality in women with CVD, but increased mortality for men without CVD. \textit{See id.}}

Additionally, high socioeconomic status does not insulate survivors from the widowhood effect and may even make it worse.\footnote{\textit{Id.} at 701.} Whether the death was unexpected or following an extended illness may also impact
the severity of spousal mortality risks, although elevated risks are generally found in either circumstance.46

Regardless of the demographic factors at play, widowhood has a negative impact on many aspects of a person’s health.47 Aside from an increased mortality risk, studies have shown widowhood to be associated with loss of physical functioning and mobility,48 declines in mental and cognitive health,49 worse word recall,50 anxiety,51 and increased blood pressure.52 One of the most prevalent consequences of widowhood is an increase in depressive symptoms.53 Studies have shown the prevalence rate for clinical depression to be somewhere between 15% and 30% during the first year of widowhood.54 Even if the symptoms do not rise to the level of clinical depression, “widowed persons seem to have a higher depressive level for several years after the death of their spouse.”55 Widows have been found to lose an average of 12% of their residual life expectancy, with many of their remaining healthy years being replaced by unhealthy ones.56

Grief and stress accompany the loss of loved ones other than spouses, although the health consequences generally are not as strong.57 Studies

46 See Sunil M. Shah et al., The Effect of Unexpected Bereavement on Mortality in Older Couples, 103 AM. J. PUB. HEALTH 1140, 1143 (2013) (noting that “[u]nexpected bereavement led to a greater relative rise in mortality than when the deceased partner had known comorbidity or high health service use before death’); see also Allison R. Sullivan & Andrew Fenelon, Patterns of Widowhood Mortality, 69 J. GERONTOLOGY SERIES B: PSYCHOL. SCI. & SOC. SCI. 53, 54-55 (2014) (finding a higher risk of widowhood when the death was unexpected for men, but not for women).

47 See Vable et al., supra note 8, at 289-91.


49 See Stahl et al., supra note 43, at 702.

50 See Vable et al., supra note 8, at 289-90.

51 See Deborah S. Carr, Black/White Differences in Psychological Adjustment to Spousal Loss Among Older Adults, 26 RES. ON AGING 591, 610 (2004).


53 See Hyo Jung Lee et al., Sex Differences in Depressive Effects of Experiencing Spousal Bereavement, 17 GERIATRICS & GERONTOLOGY INT’L 322, 324-28 (2017); Perrig-Chiello et al., supra note 39, at 769-70; Stahl et al., supra note 43, at 702.

54 See Lee et al., supra note 53, at 322.

55 Id.


57 See W. Dewi Rees & Sylvia G. Lutkins, Mortality of Bereavement, 4 BRIT. MED. J. 13, 16 (1967). While most of these studies do not demonstrate connections as prominent as those in the widowhood effect, they do support the notion that “health is
have found some increased mortality risk often accompanies the loss of other close relatives such as parents, children, or siblings. One study showed significantly elevated mortality risk for minor children (ages ten to nineteen) upon the death of a parent, although there was no notable increased risk for adult children. There is some indication that loss of a parent while still a child creates lasting mortality risks. As a parent, the death of a son or daughter also increases mortality risk, particularly in the first few years after the loss. One study showed an elevated mortality risk during the first year of bereavement for “close relatives” — children, parents, and siblings — of about 3%, with a 12% risk for spouses and 1% baseline mortality risk. Death of a close friend can also trigger increased negative health outcomes. Overall, the risk of mortality caused by loss of someone other than a spouse is harder to generalize and is less robustly documented than the widowhood effect.

B. Explaining the Widowhood Effect

Academics have theorized why the risks of widowhood are so persistent throughout a variety of societies and time periods. Modern research primarily focuses upon three possible explanations for the widowhood effect: causality, homogamy, or shared environmental exposures.

not merely a phenomenon emanating strictly from the individual but also a social feature that may be influenced by one’s immediate relationships.” Mikael Rostila & Jan M. Saarela, Time Does Not Heal All Wounds: Mortality Following the Death of a Parent, 73 J. MARRIAGE & FAM. 236, 245 (2011).

See, e.g., Jiong Li et al., Mortality After Parental Death in Childhood: A Nationwide Cohort Study from Three Nordic Countries, 11 PLOS MED. 1, 1 (2014).

See Rostila & Saarela, supra note 57, at 238-39. A different study did show at least some elevated risk throughout young adulthood when a child loses a parent. Li et al., supra note 58, at 9.


See Limor Schorr et al., Mortality, Cancer Incidence, and Survival in Parents After Bereavement, 26 ANNALS EPIDEMIOLOGY 115, 117 (2016); see also Jiong Li et al., Mortality in Parents After Death of a Child in Denmark: A Nationwide Follow-Up Study, 361 LANCET 363, 365 (2003) (finding that child loss was associated with a 29% increase in mortality risk for the parents during the first three years after the death of the child).

See Rees & Lutkins, supra note 57, at 16.

See Wai-Man Liu et al., Death of a Close Friend: Short and Long-Term Impacts on Physical, Psychological and Social Well-Being, 14 PLOS ONE 1, 13 (2019).


See id.
Causality, which recognizes a causal connection between bereavement and increased mortality (since widowhood involves both losing the health benefits of marriage and experiencing the detrimental aspects of widowhood), is the theory most supported by existing literature. Studies have shown that marriage promotes healthy behaviors and discourages unhealthy ones. Married couples also enjoy better health outcomes than the unmarried people due to the social benefits that come with shared household living and more extensive friendship and kinship networks. As a result, married couples “have higher wages, higher incomes, lower rates of poverty, accumulate more wealth, report higher levels of happiness, are less susceptible to psychological disorders, are less prone to suicide, and are less likely to be involved in criminal activity.”

Upon the death of a spouse, the marital benefits decrease or disappear altogether and the detrimental effects of widowhood take over. The detrimental effects of widowhood include poor nutrition, reduced quality for medical care sought, increased smoking, less physical activity, loss of appetite, and loss of economic resources. Widowhood is accompanied by emotional stress and grief, loss of social support, and loss of material and task support, all of which are said to be causal mechanisms by which widowhood is linked to poor health and excess mortality. The impact of emotional stress is said to dominate during the short-term effects of widowhood, while the impacts from loss of social, material, and task support are said to dominate at longer durations of bereavement. Taken together, these factors support the theory that there is a causal relationship between the transition into widowhood and the heightened mortality risk.

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67 See id. at 852-53.
68 See id. For example, spouses encourage regular eating and sleeping habits, provide a ready source of emotional support, and provide direct care in case of illness. See Elwert & Christakis, Widowhood and Race, supra note 5, at 17.
69 See id.
70 Espinosa & Evans, supra note 9, at 1326.
71 See Elwert & Christakis, Widowhood and Race, supra note 5, at 18.
72 See Espinosa & Evans, supra note 9, at 1328.
73 See Elwert & Christakis, Widowhood and Race, supra note 5, at 18.
74 See Martikainen & Valkonen, Rates and Causes of Death in a Large Finnish Cohort, supra note 24, at 1092; see also Shor et al., supra note 20, at 599 (stating that “the immediate stress caused by widowhood is indeed an important factor in increasing the risk of mortality”).
75 See Martikainen & Valkonen, Mortality in Relation to Bereavement in Finland, supra note 33, at 268.
Alternatively, some studies suggest that the widowhood effect is the result of homogamy or spousal similarity.76 Under the homogamy, or “spousal selection” theory, the relationship between widowhood and increased mortality is not causal.77 Instead, “the mortality of both members of the married couple is spuriously correlated because ‘like marries like.’”78 Studies have found that spouses tend to resemble each other in many of their personal traits, and correlations have been found in characteristics such as age, race, religion, socioeconomic status, class background, social affiliations, education, IQ, height, waist circumference, and even earlobe length.79 Because some of these traits are independent predictors of mortality,80 the fact that spouses share many of these characteristics offers a noncausal explanation as to why spouses may die within close succession of one another.

Lastly, the shared environmental exposures theory offers another noncausal explanation to the widowhood effect.81 Similar to homogamy, if the couple is jointly exposed to detrimental external conditions, such as residential toxins, air pollution, or cigarette smoke, “such factors may induce an association between the mortality of the husband and wife, even though the death of one spouse does not cause an increase in mortality for the other.”82 Spouses might, for example, ingest poison from the same bottle of medicine83 or perish in the same airplane crash.84

Of these three theories, most studies support causality as the leading explanation for the widowhood effect, with marriage selection and

77 See id.
78 Id. at 851.
79 See id. at 853; Espinosa & Evans, supra note 9, at 1328. For a discussion of similarities in spousal earlobe length and other quirky physical similarities sparked by “assertive mating,” see J. Philippe Rushton et al, Personality and Genetic Similarity Theory, 8 J. SOC. & BIOLOGICAL STRUCTURES 63, 78 (1985).
80 Not earlobe length (or perhaps no one has been able to attain funding to study this).
81 See Elwert & Christakis, Wives and Ex-Wives, supra note 14, at 853. This theory has alternatively been described as the “selection” theory. See Sullivan & Fenelon, supra note 46, at 53-54 (noting that “[s]election into widowhood may play a role as those who are more likely to become widows may also have an independent elevated mortality risk because of shared household characteristics,” such as lower socioeconomic status).
84 See, e.g., Waldman v. Maini, 195 P.3d. 850, 853 (Nev. 2008) (a Christmas Day airplane crash killed both spouses as well as the couple’s children and the wife’s parents).
shared environmental exposure playing only a small part. In one study, Paul Boyle and his colleagues tested for the selection effect by controlling for spousal causes of death that correlate with socioeconomic factors shared in couples. The results support the causal theory over spousal selection because adjusting for causes of death related to socioeconomic variables reduced but did not eliminate the widowhood effect. Further support for the causality theory stems from research where Felix Elwert and Nicholas Christakis tested the impact of an ex-wife’s death on her ex-husband’s mortality. An association between the mortality of ex-wives and ex-husbands similar to that which is observed in the widowhood effect would indicate homogamy or shared environmental exposure bias. The results found a lack of a significant effect of an ex-wife’s death on an ex-husband’s mortality, thus strengthening a causal interpretation of the widowhood effect.

On the other hand, British psychiatrist Colin Murray Parkes and his colleagues demonstrated that marital selection and shared environmental exposure do play at least a small role in the widowhood effect. Parkes et al. hypothesized that if homogamy or shared environmental exposure were explanations for the widowhood effect, then husbands and wives would die from the same or similar diseases. The results showed that 22.5% of the deaths within the first six months of widowhood were from the same diagnostic group as the preceding spouse, suggesting that homogamy and shared environmental exposure account for at least a portion of the overall increase in mortality following bereavement.

85 See Elwert & Christakis, Wives and Ex-Wives, supra note 14, at 851; Parkes et al., supra note 28, at 743.
86 See Boyle et al., supra note 41, at 1 (testing for causes of death informative of shared socioeconomic background, shared health-related lifestyles, common access to and utilization of health care resources, and shared attitudes to risk).
87 See id. at 4.
89 See id. at 852, 854, 856.
90 See id. at 868; Martikainen & Valkonen, Mortality in Relation to Bereavement in Finland, supra note 33, at 267-68 (suggesting that the major stress accompanied with spousal bereavement has a causal effect on mortality).
91 Parkes et al., supra note 28, at 743.
92 See id.
93 See id. at 741-43; see also Espinosa & Evans, supra note 9, at 1339-40 (suggesting that both the causal effect of losing the marital protection and the noncausal effect of marriage selection have a role in the widowhood effect).
Overall, the mechanism of the widowhood effect is not completely understood, however, it is clear that the death of a spouse detrimentally impacts the living spouse.

C. Exploring the Timing and Duration of the Widowhood Effect

As the previous Section established, the widowhood effect is well-established and grave. For purposes of optimizing the law of simultaneous death, however, it is insufficient to note merely that heightened risk of mortality exists. The timing of this heightened risk is crucial.

Most studies agree that increased health and death risks peak within the first weeks or months of losing a spouse. Death of a spouse causes an immediate increase in stress levels for the survivor, which in turn, is associated with acute physical and mental health consequences. Stress levels decline as bereaved individuals adapt to widowhood and the mortality risks likewise decline. Although the adverse health consequences of spousal bereavement can remain elevated for decades, the most dangerous period of time to be a widow is throughout the several months after obtaining that status. Multiple studies and meta-analyses have pinpointed the first six months as the period in which mortality risk peaks, with heightened risk of death in the neighborhood of 60% greater compared to those never widowed.

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94 Grave as in -stone.
95 See Orly Manor & Zvi Eisenbach, Mortality After Spousal Loss: Are There Socio-Demographic Differences?, 56 SOCY SCI. & MED. 405, 405 (2003); see also Jaakko Kaprio et al., Mortality after Bereavement: A Prospective Study of 95,647 Widowed Persons, 77 AM. J. PUB. HEALTH 283, 285 (1987) (finding that “[t]he principal excess mortality observed. . . was found during the first week, month, and half-year after bereavement . . .”); P. Lichtenstein et al., A Twin Study of Mortality After Spousal Bereavement, 28 PSYCHOL. MED. 635, 638 (1998) (finding that “mortality risk is higher for recently widowed individuals whereas the death hazard diminishes the longer the widowed are followed-up after the widowhood event”).
96 See Manor & Eisenbach, supra note 95, at 405; Martikainen & Valkonen, Rates and Causes of Death in a Large Finnish Cohort, supra note 24, at 1091-92.
97 See Manor & Eisenbach, supra note 95, at 405.
98 See Boyle et al., supra note 41, at 4; J. Robin Moon et al., Short- and Long-Term Associations Between Widowhood and Mortality in the United States: Longitudinal Analyses, 36 J. PUB. HEALTH 382, 386 (2013) [hereinafter Short- and Long-Term Associations]; Moon et al., Widowhood and Mortality 2011, supra note 32, at 4-5; see also Elwert & Christakis, The Effect of Widowhood, supra note 9, at 2092.
99 See Shor et al., supra note 20, at 596; see also Boyle et al., supra note 41, at 3-4; Carlos F. Mendes de Leon et al., Widowhood and Mortality Risk in a Community Sample of the Elderly: A Prospective Study, 46 J. CLINICAL EPIDEMIOLOGY 519, 523-25 (1993).
Using Empirical Data on the Widowhood Effect

One particularly notable meta-analysis was performed by McGill University sociologist Eran Shor and his coauthors. They ran a meta-analysis of 123 studies published between 1955 and 2007 that examined the association between widowhood and heightened mortality risk. The article reports an average excess mortality risk of 58% in the studies that followed-up within the first six months of widowhood.

A second large-scale meta-analysis also supports the conclusion that the six-month time frame is the deadliest window. In *Widowhood and Mortality: A Meta-Analysis*, Harvard sociologist J. Robin Moon and her coauthors explained their statistics on twelve studies that examined the association between widowhood and increased mortality risk. The studies used data from the United States, Finland, the United Kingdom, Scotland, Sweden, Japan, and Israel representing a total of 2,263,888 individuals. They found that the widowhood effect was “stronger in the period earlier than six months since bereavement . . . compared to the effect in later time.” Specifically, they found that the first six months were associated with about a 40-50% increase in mortality risk, after which the risk eventually fell to 14%.

Professor Carlos F. Mendez de Leon and his fellow researchers gathered consistent data using information from the Yale Health and Aging Project. This study involved 677 married males aged sixty-five and older. Their results were approximately the same, showing a 69% increase in mortality during the first six months of widowhood and a 40% increase in mortality risk for the first twelve months.

A recent Scottish study confirms the six-month period of highest risk. Boyle et al. used data from the Scottish Longitudinal Study to evaluate 5,002 widowed men and 9,628 widowed women. During their fourteen-year follow-up period, 2,015 widowers (40%) and 2,548

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100 See Shor et al., supra note 20, at 579, 588. The 123 studies covered twenty-two countries and represented more than 500 million people with a mean age of forty years and older. Id. at 588-90.

101 See id. at 596. The risk was noted at 33% in the studies that followed-up for the first year of widowhood and 51% in the studies that followed-up for two years after widowhood. Id.

102 See Moon et al., *Widowhood and Mortality 2011*, supra note 32, at 3-4.

103 See id. at 4.

104 Id.

105 See id.

106 See Mendes de Leon et al., supra note 99, at 520.

107 See id. at 522.

108 See id. at 523.

109 See Boyle et al., supra note 41, at 4.

110 See id. at 2.
widows (26%) died after spousal bereavement. Their results similarly showed about a 60% increase in mortality risk during the first six months of widowhood, after which the risk fell to about 40% for men and 20% for women at the first-year mark.

A 2003 study using Israeli data also noted heightened mortality risks, this time of 40-50%, for the first six months following spousal bereavement. In *Mortality After Spousal Loss: Are There Socio-Demographic Differences?*, Orly Manor and Zyi Eisenbach studied 49,566 married men and 41,264 married women, aged fifty to seventy-nine, using data obtained from the Israel Longitudinal Mortality Study. Their results showed that during the first six months of widowhood, men experienced about a 40% increase in mortality risk and women experienced about a 50% increase in mortality risk. The risk then decreased to about 20% for both men and women in the following seven to twelve months. An older study, *Broken Heart: A Statistical Study of Increased Mortality Among Widowers*, similarly demonstrated a 40% increase in mortality rate compared to that of married men during the first six months following spousal bereavement.

Although many studies and meta-analyses indicate the risk peaks at around six months, there have been other studies with shorter or longer timelines for increased morbidity. For example, a Finnish study in the 1980's found that the first week after widowhood posed the highest mortality risk. Relying on data from a 1985 census in Finland, they studied about 820,000 married men and 760,000 married women, 10,000 of whom died after becoming widowed. Their results showed an excess mortality of 50% for both men and women within the first week of bereavement, with the risk for men declining to about 30% within the first six months and then 20% thereafter.

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111 See id.
112 See id. at 2-3.
113 See Manor & Eisenbach, *supra* note 95, at 407-08; see also Moon et al., *Widowhood and Mortality 2011*, *supra* note 32, at 4; Parkes et al., *supra* note 28, at 741.
114 See Manor & Eisenbach, *supra* note 95, at 406.
115 See id. at 405.
116 See id. at 407-08.
117 See Parkes et al., *supra* note 28, at 741. Parkes et al. studied a total of 4,486 widowers aged fifty-five and older, identified from the death certificates of their wives. Id.
119 See Martikainen & Valkonen, *Mortality in Relation to Bereavement in Finland*, *supra* note 33, at 267. Relying on data from a 1985 census in Finland, they studied about 820,000 married men and 760,000 married women, 10,000 of whom died after becoming widowed. See id. at 264-65. Their results showed an excess mortality of 50% for both men and women within the first week of bereavement, with the risk for men declining to about 30% within the first six months and then 20% thereafter. See id. at
three months following widowhood to be the deadliest, with risks declining markedly between three months and six months. The six-month window is not universally accepted as the standard period of highest risk; however, it does seem to be the most commonly identified one.

Although the heightened mortality risk of bereaved individuals substantially declines after the period immediately following widowhood, the risk still remains elevated to some degree for at least a decade. One meta-analysis in particular found the widowhood effect persists for at least twenty years. Shor et al. found that in studies with follow-ups of sixteen to twenty years after widowhood, the average mortality risk remained elevated at 22%; at twenty-one to twenty-five years after widowhood, the average mortality risk was 27%; and at twenty-five years or more, the average mortality risk was 11%. Surviving the first several months, therefore, is no guarantee that a spouse has escaped the health threat of bereavement. Spouses remain at substantial risk of death that, although not simultaneous, is hastened by the widowhood effect.

Although the bereavement period recognized by researchers is in the magnitude of months, the law of simultaneous death is untethered to these empirical findings. The following Part discusses the current state of the law of simultaneous death with particular attention as to the timing of bereavement and notes the gap between social science and the law.

IV. THE LAW OF SIMULTANEOUS DEATH

Wealth transfer law offers a two-tiered system: first, a set of default rules for those who have not opted out and second, broad authority to
draft documents that convey property as the owner wishes.\textsuperscript{124} Default rules apply to doctrines like intestacy, which governs in the absence of any will at all, but also controls in cases where the decedent’s intention is unclear so a court must apply a rule of construction to determine a document’s outcome.\textsuperscript{125} Simultaneous death laws are properly considered a rule of construction, which applies both where there is no will and when the governing document is silent.\textsuperscript{126} States vary as to whether the rules relating to simultaneous death apply only to probate transfers or to non-probate transfers (and other benefits)\textsuperscript{127} as well.\textsuperscript{128} The following Sections describe the main default rules with respect to simultaneous death and common drafting techniques to opt out of the default.

\textbf{A. Default Rules of Simultaneous Death}

There is no common law rule of simultaneous death, so default rules are established by state statutes.\textsuperscript{129} The vast majority of states have

\begin{itemize}
  \item \textsuperscript{124}See John H. Langbein, \textit{The Contractarian Basis of the Law of Trusts}, 105 \textit{Yale L.J.} 625, 650 (1995) (“[V]irtually all trust law is default law — rules that the parties can reject.”).
  \item \textsuperscript{126}See Naomi R. Cahin, Alyssa A. DiRusso & Susan N. Gary, \textit{Trusts and Estates in Focus} 4 (2019) (noting that in cases where a will is silent or ambiguous, courts apply a rule of construction to determine testator intent).
  \item \textsuperscript{127}See Richard F. Storrow, \textit{Wills and Survival}, 34 \textit{Quinnipiac L. Rev.} 447, 475 (2016) (noting that in some states, the application of simultaneous death rules is “not limited to wills and intestacy but can also be found in provisions designed for the protection of the testator’s spouse and children, including the elective share, the homestead allowance, and provisions relating to will substitutes”).
  \item \textsuperscript{128}See Eric Butler, Comment, Estates and Probate — Ellis v. Ellis: Survivorship Properties in Tennessee Remain Unaffected by the 120 Hour Provision of the Tennessee Uniform Simultaneous Death Act, 33 \textit{Mem. L. Rev.} 681, 690 (2003) (noting that jointly held property was not subject to the 120-hour rule under state law). They also vary as to whether they apply only to intestate property or property that passes under a will.
  \item \textsuperscript{129}See In re Moran’s Estate, 395 N.E.2d 579, 580 (Ill. 1979) (noting the lack of simultaneous death rules at common law); Richard W. Harris, \textit{Federal Estate Tax Consequences of Common Disasters or Closely Proximate Deaths}, 47 \textit{Tax L.W.} 763, 765-66 (1994) (“The early common law provided no presumption regarding survivorship in simultaneous death cases . . . In an effort to bring order and certainty to this generally frustrating area of law, several state legislatures devised various mechanisms to
default rules relating to simultaneous death that fall within two broad categories. The modern rule is that an heir or beneficiary must survive a decedent for at least 120 hours in order to acquire the property. For states that have not adopted the modern approach, the most common default rule is to require only sufficient evidence of some survival in order to take. Both of these rules are keyed to the Uniform Simultaneous Death Act (“USDA”), which was completed by the Uniform Law Commission in 1940 and revised in 1991, with amendments in 1993. These two primary approaches will be discussed in turn.

Many states have modeled their survivorship statutes upon the most modern version of the USDA (referred to here as “1993 USDA”). The 1993 USDA establishes a mandatory survivorship rule of 120 hours for purposes of receiving property under intestacy and certain other statutory benefits. Under the 1993 USDA, subject to certain exceptions:

resolve simultaneous death cases. Such presumptions as ‘the younger person survives the older,’ or ‘the male survives the female,’ or that a ‘parent survives a minor child or infant’ were used.”

130 See Haneman, supra note 125, at 236 (noting that some “covered” states allow holographic wills and the 120-hour rule, and other “uncovered” states disregard the rule entirely).

131 See id. at 249-50, which provides a very recent fifty-state survey of which states have adopted the 120-hour rule. Professor Haneman also points out that some states apply a different rule of simultaneous death to holographic wills, which can result in injustice for the unrepresented or under-represented. See id. at 232-38.

132 See id. at 238. When states have a rule requiring only evidence of some survival, even a fraction of a second can be sufficient. For an example, see In re Rowley’s Estate, 65 Cal. Rptr. 139, 143-45 (Cal. 1967) where a jury found that an estimated 1/50,000 of a second was sufficient to count as “survival” for the purpose of the law. The case recounts a ghoulish car crash in which the “impact was so great that the women were literally torn to pieces” with “extremities and brains scattered about,” and “[a] dog, which was apparently either on her lap, or close to her, was crushed to the point that its remains could not readily be distinguished from hers.” Id. at 142-43. The case reported the following on how the survival was calculated: “I took the highway patrolman’s report of the speed of the Cadillac and the speed of the Falcon coming together, and made a rough guess at how much longer time it took the Falcon to push Mrs. Rowley over and kill Mrs. (sic) Cooper. That would be a rough mathematical guess.” Id. at 143.

133 See UNIF. LAW COMM’N, https://www.uniformlaws.org/committees/community-home?CommunityKey=09a6c8d3-0ee6-4b94-bd85-2386ed145502 (last visited Dec. 28, 2019) [https://perma.cc/2WF8-CE45] (noting that a version of the Act was enacted in forty-nine states and it has been incorporated into the Uniform Probate Code).

134 See Lawrence W. Waggoner & Edward C. Halbach, Jr., The UPC’s New Survivorship and Antilapse Provisions, 55 ALB. L. REV. 1091, 1094 (1992) (noting that the
If the title to property, the devolution of property, the right to elect an interest in property, or the right to exempt property, homestead or family allowance depends upon an individual’s survivorship of the death of another individual, an individual who is not established by clear and convincing evidence to have survived the other individual by 120 hours is deemed to have predeceased the other individual. 135

The 1993 USDA provides a similar rule for governing instruments, which “for purposes of a provision of a governing instrument that relates to an individual surviving an event, including the death of another individual, an individual who is not established by clear and convincing evidence to have survived the event by 120 hours is deemed to have predeceased the event.” 136 For co-owners with right of survivorship or where multiple joint owners have failed to survive each other by more than 120 hours, a proportionate fraction of the property passes as if each co-owner survived the other. 137 Individuals can override the 120-hour-survival period in a governing instrument so long as there is clear and convincing evidence of at least some survival. 138 The Act will not require 120 hours of survival where doing so violates the Rule Against Perpetuities, 139 “would result in an unintended failure or duplication of a disposition,” 140 or would lead to the escheat of an intestate estate. 141

Most states that have not adopted a statute similar to the 1993 USDA instead apply the rule established under the original version of the USDA (here, “1940 USDA”). 142 Under the 1940 USDA, if there is “no sufficient evidence that the persons have died otherwise than simultaneously,” 143 the anticipated recipient of the property 144 is unable

120-hour survivorship is mandatory for intestate succession and a default rule subject to override by documents for other types of transfers).

136 Id. § 3.
137 See id. § 4.
138 See id. §§ 6-1 to -2.
139 See id. § 6-3.
140 Id. § 6-4.
141 See id. § 2.
142 See Haneman, supra note 125 at 227.
143 Unif. Simultaneous Death Act § 1 (Unif. Law Comm’r 1940).
to receive the deceased’s property.\textsuperscript{145} Thus, only bare evidence of survivorship is required to allow the recipient to take the property, promptly die, and pass it through his or her own estate.\textsuperscript{146}

Why was the survivorship requirement increased from bare survivorship in the 1940 USDA to 120 hours in the 1993 USDA? The answer, given how data-driven policy-making is now, is surprisingly anecdotal.\textsuperscript{147} Much of the impetus appears to be the tragic and high-profile case of \textit{Janus v. Tarasewicz}.\textsuperscript{148} In this case, newlyweds Stanley and Theresa Janus both consumed Tylenol tainted with cyanide while gathering to mourn the death of Theresa’s brother (who, unbeknownst to them, had also died from swallowing the poisoned medication).\textsuperscript{149} When they arrived at the hospital on the evening of September 29, Stanley died promptly, but medical personnel were able to temporarily revive Theresa and restart cardiorespiratory functions.\textsuperscript{150} However, Theresa did not significantly improve and was pronounced brain dead by the afternoon of October 1.\textsuperscript{151} Because clear evidence showed that Theresa outlived her husband by forty-one hours, she had “survived” him for purposes of receiving his property under the Illinois version of the 1940 USDA.\textsuperscript{152} Since Theresa survived Stanley, the proceeds of Stanley’s life insurance policy, which had named Theresa as primary beneficiary and Stanley’s mother as alternate, passed through Theresa’s

\begin{itemize}
\item \textsuperscript{145} See UNIF. SIMULTANEOUS DEATH ACT § 1.
\item \textsuperscript{146} If the 1940 USDA applied in Verona (which is admittedly impossible), because evidence clearly established that Romeo died by poison before Juliet died by plunging a dagger into her bosom, Juliet would have been considered to have survived her husband. Assuming a typical U.S. intestacy statute applied, the consequence of such brief survival would be that Romeo’s assets would pass through Juliet’s estate and be distributed in equal shares to Lord Capulet and Lady Capulet. Lord Montague probably would have declined to erect his planned gold statue of Juliet under such circumstances. See SHAKESPEARE, supra note 1, at act 5, sc. 3. Lady Montague, having already died of grief over the exile of her son, would have nothing to say in the matter. Id.
\item \textsuperscript{147} See Thomas P. Gallanis, \textit{Death by Disaster: Anglo-American Presumptions, 1766-2006}, in THE LAW OF PRESUMPTIONS: ESSAYS IN COMPARATIVE LEGAL HISTORY 189, 197-98. (R.H. Hemholz & W. David H. Sellar eds., 2009). This fascinating essay reports on a variety of presumptions of survival under historical laws of other countries, such as those based on sex, age, or relative health of the individuals dying in a common accident. See id.
\item \textsuperscript{148} 482 N.E.2d 418 (Ill. App. Ct. 1985).
\item \textsuperscript{149} See id. at 419.
\item \textsuperscript{150} See id. at 419-21.
\item \textsuperscript{151} See id. at 421.
\item \textsuperscript{152} See id. at 424.
\end{itemize}
estate and were distributed to Stanley’s father-in-law pursuant to Theresa’s will.153

Aside from the Janus case, the primary motivation for increasing the survivorship time seems to be perceived awareness of transportation fatalities.154 The promulgators of the uniform law also expressed concern that “gruesome litigation” required to determine the order of deaths in close proximity ought to be avoided155 and to be fair, the litigation has been nasty.156 Further, the fact that in a murder-suicide, the murderer often briefly survives his victim is another fair criticism of the original survivorship requirements.157 Some states have articulated reasoning for expanding survivorship from bare evidence to the 120-hour rule; California, for example, enacted the 120-hour rule for intestate estates to prevent children from prior marriages from inheriting when remarried couples die instantaneously.158 The federal government also incorporated the 1993 USDA into the Uniform Probate Code because the Commissioners recognized that multiple probates in quick succession were inefficient and unlikely to reflect the decedent’s
Still, many states continue to use the traditional 1940 USDA rule requiring only sufficient evidence of some survival.

Legal scholarship relating to simultaneous death is surprisingly sparse, although the authors who have tackled it have made meaningful contributions. One of the more productive scholars on simultaneous death is Professor Victoria Haneman, who has repeatedly criticized the simultaneous death rules on grounds of inefficiency and inconsistency. Professor Tom Gallanis has written a delightful legal history piece on the rules of simultaneous death using a comparative framework. Professor Josh Tate offered commentary on Professor Gallanis’s article, pointing out that 120 hours of survival is increasingly attainable as modern medicine improves. Although several other scholars have also made meaningful contributions, the body of legal scholarship on simultaneous death is minute compared to the prolific research on the widowhood effect produced in the social sciences and public health fields.

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159 See Unif. Probate Code § 2-104 cmt. (Unif. Law Comm’n 2010) (“This section avoids multiple administrations and in some instances prevents the property from passing to persons not desired by the decedent.”). See generally Waggoner & Halbach, supra note 134, at 1094-99.

160 See generally Victoria J. Haneman & Jennifer Booth, 120 Hours until the Consistent Treatment of Simultaneous Death under the California Probate Code, 34 Nova L. Rev. 449 (2010) (discussing the issues with applying the 120-hour survival rule differently depending on the type of will).

161 See Haneman & Booth, supra note 128, at 449-51.


163 See Joshua C. Tate, Inheritance and Presumptions, JOTWELL (July 1, 2010), https://trustest.jotwell.com/inheritance-and-presumptions/ [https://perma.cc/KG5W-3CYT]

164 Notably, there are a number of helpful articles explaining the basics of the act during the waves in which states were enacting versions of it (following the 1940 uniform act, the 1993 uniform act, or the adoption of the Uniform Probate Code incorporating these rules). See, e.g., A.E.S. Schmid, Legislation—The Uniform Simultaneous Death Act in Missouri, 1952 Wash. U. L.Q. 400 (1952) (discussing the Uniform Act and its effect on rules developed prior to its implementation). Professor Richard Storrow also provides interesting commentary on survivorship provisions in his article focusing on lapse and anti-lapse rules. See Richard F. Storrow, Wills and Survival, 34 Quinnipiac L. Rev. 447, 471-75 (2016).

165 See supra Part III.
B. Common Drafting Techniques for Simultaneous Death

Regardless of what the state law is, best practice is to draft estate planning documents to suit the needs of the individual client. Many practice guides note that clients may want a longer survivorship period to reduce the likelihood of multiple probate administrations in rapid succession.\textsuperscript{166}

Back-to-back probates are generally considered to be wasteful and incur unnecessary expense.\textsuperscript{167} Although it is true that eventually both spouses will die, the benefits of probate justify the costs only when those benefits are lasting. The benefits of probate include retitling assets, resolving creditor claims, and ensuring distribution of assets to the intended beneficiaries or heirs.\textsuperscript{168} Where property is passed through the estate of a second spouse within several months of the first spouse’s death, precious little benefit is gained from the costs of administration. Immediately after the assets are retitled in the name of the (barely) surviving spouse and distributed, one must pay again to have them retitled in the name of the successor, for the associated court costs of probate, and fees of the personal representative or attorney.\textsuperscript{169} Because administration costs are often tied to the value of the estate, the lack of time for the surviving spouse to spend down (and enjoy!) the assets can mean higher overall administration costs than if the probate of the estates had been spread over time. For this reason, many practitioner guides advise planning to avoid “double probate.”\textsuperscript{170}

For example, the Indiana Practice Series provides a model clause to direct assets to a beneficiary’s descendants if that beneficiary does not

\textsuperscript{166} See, e.g., Jeanne C. Blackmore & Livia K. DeMarchis, VT Estate Planning, in A PRACTICAL GUIDE TO ESTATE PLANNING IN VERMONT, at § 3.4.5 (1st ed. 2018) (noting that longer survivorship may be used to prevent double probate).

\textsuperscript{167} See GERRY W. BEYER & JAMES M. KOSSAKOW, 1 REVOCABLE TRUSTS 5th § 2:2 (2019) (noting that double probate is best avoided and that costs for each probate could run around $30,000-$35,000 for a $500,000 estate); STINSON, MAG & FIZZELL, 1A MO. PRAC., METHODS OF PRAC.: TRANSACT. GUIDE § 34.34 (4th ed. 2018).

\textsuperscript{168} See JESSE DUKE MINIER, ROBERT H. GITKOFF & JAMES LINDGREN, WILLS, TRUSTS, AND ESTATES 44 (9th ed. 2013).

\textsuperscript{169} The probate of an estate often triggers costs that must be paid by each estate. See CAL. CIV. PRAC. PROB. AND TR. PROCEEDINGS § 1:22 (Arnold H. Gold et al. eds., 2019) (“Costs typically incurred by the personal representative’s attorney that are reimbursable include filing fees, publication costs, costs to obtain certified letters, court costs such as attorneys’ service fees, and, if necessary, the cost to obtain an appraisal and the fee for a probate referee. This list is not exclusive.”).

\textsuperscript{170} Blackmore & DeMarchis, supra note 166, § 3.4.5 (noting that avoidance of double probate is particularly “typically attractive with wills of spouses where the ultimate beneficiaries of both wills are identical . . .”).
survive the testator by thirty days\textsuperscript{171} or alternatively, to require survival of the testator by six months in order to take.\textsuperscript{172} Likewise, in the Massachusetts Continuing Legal Education materials, \textit{A Practical Guide to Estate Planning in Rhode Island}, lawyers Jonathan V. Kalendar and Cheryl L. Shaw recommend a thirty-day survivorship clause and note that, “[w]here estate taxes are not an issue, a clause conditioning a bequest on survivorship for a period of time is attractive to prevent having to probate the property twice — once in the decedent’s estate and then again in the beneficiary’s estate.”\textsuperscript{173}

Some practitioner guides suggest drafting coordinated spousal plans in which both spouses' documents include a clause presuming that the less wealthy spouse survived the wealthier one where there is no sufficient evidence of survival.\textsuperscript{174} The purpose of such a clause is to preserve maximum benefit of the estate tax marital deduction.\textsuperscript{175}

The careful practitioner knows not to extend the survivorship requirements for spouses beyond six months in an estate that is potentially subject to the federal estate tax.\textsuperscript{176} Under section 2056 of the Internal Revenue Code, an estate is entitled to a marital deduction for qualifying transfers to a surviving spouse.\textsuperscript{177} This valuable deduction is often sufficient to reduce the tax to zero in the estate of the first spouse to die.\textsuperscript{178} Transfers that are “terminable interests” in property, however, fail to qualify for the marital deduction.\textsuperscript{179} A condition of survival that does not exceed six months is not considered a disqualifying terminable

\textsuperscript{171} See DIANE HUBBARD KENNEDY, 26 IND. PRAC. ANDERSON’S WILLS, TRUSTS & EST. PLAN. § 3:51 (2019-2020 ed.). The guide notes that some clients may want the clause to apply to some beneficiaries and not others and that the lawyer should draft accordingly. See id.

\textsuperscript{172} See id. § 3:52.

\textsuperscript{173} JONATHAN V. KALANDER & CHERYL L. SHAW, MASS. CONTINUING LEGAL EDUC., A PRACTICAL GUIDE TO ESTATE PLANNING IN RHODE ISLAND § 3.1.4(e) (1st ed. 2019) (recommending the clause, “No beneficiary hereunder shall be deemed to have survived me unless said beneficiary survives me for a period of thirty (30) days”).

\textsuperscript{174} See, e.g., EDWARD F. KOREN, 2 ESTATE, TAX AND PERSONAL FINANCIAL PLANNING § 18:50 (2019).

\textsuperscript{175} See 8C NICHOLS CYCLOPEDIA OF LEGAL FORMS ANNOTATED § 217:379 (2019).

\textsuperscript{176} See Richard W. Harris, Federal Estate Consequences of Common Disasters or Closely Proximate Deaths, 47 TAX LAW. 763, 769 n.19 (1994).

\textsuperscript{177} See 26 U.S.C. § 2056(a) (1997).

\textsuperscript{178} See generally Jonathan P. McSherry, Proper Use of the Estate Tax Marital Deduction, 88 N.Y. ST. B.J. 34, 34-38 (2016) (noting that many estate plans seek to reduce or eliminate taxes on the passage of property).

\textsuperscript{179} See id. at 36.
interest under the Internal Revenue Code and Regulations, but a survivorship requirement in excess of six months would be.\textsuperscript{180} This six-month limitation on flexibility in drafting for spousal survivorship aligns quite conveniently with what empirical research indicates is likely optimal.\textsuperscript{181} Although there is no evidence the tax law evolved based upon such empirical research, it is certainly a more closely correlated time frame than either version of the Uniform Simultaneous Death Act.

V. IMPROVING SIMULTANEOUS DEATH LAW AND DRAFTING WITH WIDOWHOOD EFFECT DATA

The empirical evidence provided by extensive studies on the impact and timing of the widowhood effect offers compelling grounds for legislatures and drafters of uniform laws and codes to reconsider the default rules of simultaneous death. It also indicates a heightened need for attorneys to draft documents to override the current default rule where doing so better suits the needs of clients. In the following Section, I will argue that the law of simultaneous death and its application should be more aligned with the empirical reality of the timing of spousal bereavement.

A. Changing Default Rules

As the empirical evidence on the widowhood effect shows, the risk of failing to survive a spouse is often untethered to a common disaster that causes death within moments or within 120 hours. Instead, it is a well-documented public health phenomenon with maximum risks most commonly identified as peaking at six months.\textsuperscript{182} This Article proposes that the Uniform Simultaneous Death Act (and statutes and uniform codes that incorporate it) should be revised in the face of this overwhelming data.

Instead of requiring survivorship of 120 hours, which is repeatedly referred to in the literature as an “arbitrary” time period,\textsuperscript{183} the survivorship requirement should be grounded in the empirical research

\textsuperscript{180} See MYRON KOVE ET AL., BOGERT’S TRUSTS AND TRUSTEES § 275.10 (2019).

\textsuperscript{181} See supra Part III.C (discussing the timing and duration of the widowhood effect).

\textsuperscript{182} See discussion supra Part III.

\textsuperscript{183} See, e.g., Haneman & Booth, supra note 128, at 450 (“[M]any states have adopted arbitrary time periods by which one decedent must survive the other to inherit.”); Waggoner & Halbach, supra note 134, at 1095 (calling the 120-hour period “admittedly but inescapably arbitrary”). This Article argues that empirical data now makes using an arbitrary time period escapable.
supporting a six-month time period lapse before one spouse can be deemed to have sufficiently survived the other. As I will explain below, I believe this expanded survivorship requirement should apply to both probate and non-probate transfers, but should be restricted to spouses. Unrelated beneficiaries or those who are related by blood are better served with a period shorter than six months, although quite possibly longer than 120 hours.

A revised version of the Uniform Simultaneous Death Act (or Uniform Probate Code provision incorporating such a rule) that is consistent with the empirical data would create a special rule for transfers between spouses which would replace the term “120 hours” with the term “six months,” every time it appears in the Act. This recommendation is consistent with how the Internal Revenue Code determines spousal survivorship with regards to the prohibition against terminable interests in property. The Internal Revenue Code and Regulations (and associated law) provides guidance on how to count months for purposes of tax law; the Uniform Act and state statutes should use that rule in cases where it is questionable whether six months have elapsed or not.\footnote{See 26 U.S.C. § 1223 (2018), which establishes how to determine the holding period of assets for purposes of calculating short-term or long-term gain. Although the current holding period is a year, for quite some time it was six months. For guidance explaining exactly how to count six months, see Treas. Reg. § 1.1223-1 (2019).}

Before implementing such a change, however, more research should be conducted to determine whether the majority of would-be decedents would choose to extend this survivorship period. Although it seems intuitive to conclude that a spouse would rather property pass through his or her own estate to an alternate beneficiary or heir if a spouse succumbs to the widowhood effect in six months — we should not rely on intuition. The empirical evidence is convincing that the peak risk of mortality is six months following the death of a spouse. The next step is gathering data on whether individuals do want to alter the disposition of their estates in light of that risk.\footnote{See Robert H. Sitkoff, Trusts and Estates: Implementing Freedom of Disposition, 58 St. Louis U. L.J. 643, 645 (2014) (noting that intestacy default rules must be designed to reflect what a typical intestate person would want).}

B. Changing Estate Planning Techniques

Unless or until state default statutes on simultaneous death change to adapt to social science research on the widowhood effect, the best solution rests in the hands of lawyers. With heightened awareness of the extended risk of mortality following the death of a spouse, lawyers
can draft more mindfully and design survivorship requirements that map onto the six-month timeframe. Unlike the challenge in creating statutes that apply to the hypothetical decedent, lawyers have the luxury of mapping the survivorship requirement directly onto individual client preferences.¹⁸⁶

For estates worth millions of dollars and potentially vulnerable to the estate tax, lawyers will not want to risk loss of the marital deduction by extending the survivorship period beyond six months. For estates that are small enough for taxes to be immaterial, the lawyer should discuss with the clients whether a longer survivorship period, such as a year, might be a better time frame. Extended survivorship periods are most appropriate for couples who have different beneficiaries, such as children from outside the marriage. Also, having some property subject to a longer survivorship period than others is also a possible plan.

Lawyers will need to remain mindful of the goals of clients relating to providing a comfortable level of support to the surviving spouse during the six-month period following death. Ensuring the surviving spouse has enough income to maintain his or her standard of living may require passing some property sooner. This need should be lower in community property states and where each spouse has sufficient independent wealth to weather the gap in access to assets. As always, drafting attorneys will need to adjust their documents to align with individual client circumstances and state law.

Where it is not possible to work around the default 120-hour or bare survival rule, lawyers may be able to use disclaimer to avoid probating significant property in the estate of both spouses. This technique is most appropriate where the spouses share common goals for distribution to beneficiaries. In order to work around the default simultaneous death act regarding survivorship, lawyers should be careful to comply both with state rules for executing a valid disclaimer and tax rules for assuring that the disclaimer is not treated as a taxable transfer. Lawyers must also remain aware of circumstances where the inclusion of assets in the estate of the first spouse to die gains tax advantages for the family, including potential state or federal income or estate/inheritance tax matters.

C. Why Have a Different Survivorship Timeframe for Spouses?

Spouses are certainly not the only family members or common beneficiaries who may die within proximity of each other. The

¹⁸⁶ These preferences can now, of course, be informed by an understanding of the risks of the widowhood effect.
likelihood of a common “disaster” like a car crash varies depending on how frequently people subject themselves to the same risks, not what their familial relationship is. And certainly, non-spouses may naturally die within short order of each other, like when Carrie Fisher died the day before her mother, Debbie Reynolds.\textsuperscript{187} Still, the research indicates that the widowhood effect is different for spouses than it is for other family members.\textsuperscript{188} Perhaps more importantly, there are structures in place that serve to protect the surviving spouse, but not other relatives or beneficiaries.

State and federal laws afford benefits to surviving spouses that are generally not available to other surviving loved ones. Under current Social Security rules, a surviving spouse is often entitled to payments following the death of an employee.\textsuperscript{189} A spouse also normally has an exclusive right to assets held in an employment plan governed by the Employee Retirement Income Act of 1974 (ERISA).\textsuperscript{190} Surviving spouses are also often entitled to statutory protections such as a homestead exemption,\textsuperscript{191} personal property set-aside,\textsuperscript{192} and family allowance,\textsuperscript{193} although the USDA and many statutes may tie these rights


\textsuperscript{188} See discussion supra Part III.

\textsuperscript{189} See Benefits Planner: Survivors, SOC. SEC. ADMIN., https://www.ssa.gov/planners/survivors/ifyou.html [https://perma.cc/U2YA-UJ8P]. The benefits generally include a one-time lump payment of $255 and periodic payments for life, so long as the spouse is eligible. See id. A spouse can receive only the higher of his or her own social security payments and survivor benefits. See How Does Social Security Work When a Spouse Dies?, AARP (Oct. 10, 2018), https://www.aarp.org/retirement/social-security/questions-answers/social-security-spouse-dies.html [https://perma.cc/95BE-Q934]. A spouse of at least nine months is able to receive benefits so long as she is at least sixty years old, or age fifty and disabled, or any age and caring for the decedent worker’s children who are under age sixteen. See id. Some exceptions apply. See id.


\textsuperscript{191} See, e.g., IDAHO CODE ANN. § 15-2-402 (2008) (“The homestead allowance is exempt from and has priority over all claims against the estate . . . .”); UNIF. PROBATE CODE § 2-402 (UNIF. LAW COMM’N 2008) (“A decedent’s surviving spouse is entitled to a homestead allowance of [$22,500].”).

\textsuperscript{192} See, e.g., ALA. CODE § 43-8-111 (1982) (“[T]he surviving spouse is entitled to receive . . . household furniture, automobiles, furnishings, appliances and personal effects.”); UNIF. PROBATE CODE § 2-403 (UNIF. LAW COMM’N 2008) (“[T]he decedent’s surviving spouse is entitled from the estate to . . . household furniture, automobiles, furnishings, appliances, and personal effects.”).

\textsuperscript{193} See, e.g., MASS. GEN. LAWS ANN. ch. 190B, § 2-405 (2012) (“The personal representative may . . . disburse funds of the estate in payment of the discretionary
to survivorship by the determined amount of time.\textsuperscript{194} If these protections are afforded to the surviving spouse under state law, it makes waiting for six months to receive property from the estate more manageable.\textsuperscript{195}

One might fairly question whether the widowhood effect poses mortality risks to romantic couples and not just married couples. Although this is possible, the fact remains that unmarried romantic couples do not enjoy the protections of probate law or Social Security that offset the hardship that requiring a longer survivorship period would entail. Scholars have noted that wealth transfer law has been too slow to adapt to changes in family structures and unmarried couples.\textsuperscript{196}

family allowance payable in cash."}; UNIF. PROBATE CODE § 2-404 (UNIF. LAW COMM’N 2010) ("[T]he decedent’s surviving spouse and minor children whom the decedent was obligated to support and children who were in fact being supported by the decedent are entitled to a reasonable allowance in money out of the estate.").

\textsuperscript{194} See, e.g., UNIF. SIMULTANEOUS DEATH ACT § 2 (UNIF. LAW COMM’N 1993) ("Requirement of Survival by 120 Hours Under Probate Code."). Arguably, it is worth considering whether statutes ought to subject these statutory probate rights to survivorship requirements. Although a typical decedent would rather the bulk of his or her property pass to other heirs if a spouse fails to survive for a significant amount of time (with the debate now being how significant that time ought to be), query whether most decedents would still want a widow or widower to have priority to the homestead or exempt property over creditors, or to have an allowance from the probate court for living expenses during administration. If legislatures choose to make adjustments to any of these rights, careful attention to the risks of creating a terminable interest for estate tax marital deduction purposes is essential.


If the laws that provide support to a surviving spouse during probate or through Social Security evolve to extend to unmarried couples, it would be worth considering whether the default rule of survivorship ought to be extended to such couples as well. The law being as it is though, incorporating unmarried couples into a rule requiring extended survivorship would likely put them in a worse position than if it applied only to legally married couples. Requiring six months of survival in order to take property from an estate without providing the means to finance those six months through federal or state benefits does not put unmarried couples in a better position than leaving the simultaneous death requirement shorter does. I therefore do not propose a change in the default law for unmarried couples and would advise drafting attorneys to proceed with caution.

Overall, default rules of simultaneous death law and standard drafting techniques will better map onto the intent of decedents if the law and practice integrate empirical evidence of the widowhood effect. Social scientists and public health researchers have already invested substantial resources in documenting not only the existence of the phenomenon, but also its timing. It is an untapped resource to optimize the law of simultaneous death and drafting.

**Conclusion**

Clearly, there is a mismatch between the default legal rule for the length of survivorship (either moments in time or 120 hours) and what empirical evidence shows as the time frame with most heightened risk of deaths in close proximity of spouses (six-months). Because of this disconnect, there are avoidable inefficiencies in probate, with property passing first through the estate of the first spouse to die and then the second — more than five days but less than six months later. Not only does this result in duplicative administrative costs, it can result in failure of the law of trusts and estates to reflect accurately the intent of the decedent, as many individuals would prefer an alternate beneficiary to property passing through a spouse’s estate. Lawyers must act to avoid this tragedy.

State legislators and uniform code drafters should use empirical data to inform the default length of survivorship imposed by statute and seriously consider extending the survival period for spouses to six months. Estate planners should rely upon empirical research in

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197 As noted earlier, there should be research into whether such a change in the law reflects the intent of the typical decedent before such a change is implemented, although it seems reasonable to expect there would be support for such a change.
drafting and extend the time period beyond the default rule to one more keyed to the real-world risks of closely-timed spousal deaths. Lawyers overseeing the administration of an estate should consider disclaimer as a technique to escape duplicative probate where appropriate given the estate plans of the spouses involved.

As a general rule, trusts and estates lawyers and scholars should rely more fundamentally upon empirical research, including that produced by complementary disciplines. Unless that happens, spousal deaths in quick succession will lead to more “stor[ies] of woe” — made even more tragic by inefficient and redundant probate proceedings.

198 See supra Part II.
199 SHAKESPEARE, supra note 1, at act 5, sc. 3.