



## In the Wake of Walkerton

Terror management theory explains our response to the small town's water disaster.

**N**AÏVE? Perhaps it was, but 15 years ago the public perception was that Canadians don't die from drinking tap water. We certainly don't die from drinking water from a municipal supply in Southwestern Ontario. So when the small town of Walkerton found its drinking water supply contaminated over the course of several weeks in May 2000, sending 65 people to hospital – 27 with acute kidney failure – and killing seven, the recriminations that followed quickly reached the provincial parliament and media offices in Toronto.

Walkerton's water contamination was deeply unfortunate. But it also prompted invaluable change in Ontario's water management. Justice Dennis O'Connor's Commission of Inquiry reviewed decision making at farm, regional and provincial scales. This resulted in new source water protections, technical training requirements, water quality standards and monitoring. There has been greater funding for water-related research, more public engagement in water governance and a renewed recognition of water's part in public health, farm production and government transparency.

But beyond the politics and policy, what happened in Walkerton can also help us better understand how our fears influence our behaviour, including our decisions about water.

Terror Management Theory (TMT) is a thread in social psychology that is used to understand the influence that our mortality awareness (our knowing we will one day die) has on everyday decisions.



Downtown Walkerton has many public artworks that evoke a positive relationship with water.

We are using TMT here to re-examine the extensive media coverage of Walkerton. True, media often exaggerate emotions, especially negative ones, to increase sales. But these stories from credible sources and multiple perspectives [see "Headlines," page 46] have much to teach us about the relationship between our emotions and our responses to environmental crises.

Early theories about how we think and make decisions held that people controlled their emotions and were capable of unbiased "rational thought." This perspective persists. But cognitive science has shown that emotions have a powerful influence on our decisions. Emotions are biophysical reactions that are shaped by

social expectations to allow us to recognize and express subconscious chemical signals. When someone we love dies, for example, our brains undergo a biochemical reaction that we recognize as sadness or fear. Social permission to cry at funerals validates those emotions and allows us to express them.

Even our "rational" thinking needs emotion, to help direct us to choices about everything from what we eat to what we believe. This influence may be especially powerful for negative emotions. Researchers led by Dan Kahan at Yale, for example, found that fear of holding views at odds with one's peers was linked to denial of the science that demonstrates humanity has a hand in climate change.

IT HAPPENED TO A SMALL ONTARIO TOWN,  
ARE YOU AFRAID IT WILL HAPPEN TO YOU?





The Walkerton Clean Water Centre, established in response to the contamination, to train Ontario's water operators, was a hero project.

### Terror Management Theory

Our cognitive capacity has given us language and culture – but also an awareness of time and the perception of the “self” as an impermanent presence in time. Our ability to remember the past and think of the future creates an unavoidable awareness of our mortality. Ernest Becker in his 1973 book *Denial of Death* argued that the conscious and subconscious anxiety this awareness creates is a central driver of human behaviour.

That driver preoccupies TMT researchers. To clarify: Terror Management Theory isn't a study of crazed fanatics doing

terrible things under banners of religion or ideology. Instead, TMT is used to explore how mortality salience – reminders of our inevitable demise – affects everyday behaviour. A central insight is that we use cultural and psychological defences to temporarily block death reminders, and reassure ourselves of our significance and self-worth.

What some people call “immortality” or “hero” projects allow us to invest our identity in something that we believe will endure beyond our individual lives. Building the Hoover Dam, securing a change in the law or helping create new community institutions are all things that might give us

that feeling. The Walkerton Clean Water Centre – established in response to the contamination, to train Ontario's water operators – was one such hero project.

Psychological defences minimize our conscious awareness of mortality and help to reduce our anxiety. We may put physical or emotional distance between ourselves and other people's deaths. We may avoid hearing or reading about environmental threats. Or we may try to suppress our thoughts of death by strengthening our sense of self: I believe that climate science is valid but you do not. This stronger Us-vs-Them identity response can turn negative if we do it by increasing our hostility to people we think are different from us.

We found all of these reactions in our review of Walkerton's experience.

### Walkerton's Water Terror

For Canadians, water is bound up with our identity and daily lives. In summer we paddle, sail and swim; in winter we battle snow and ice but also break loose on skis and snowmobiles. Yet water holds risks and fears. These we don't talk about so easily and the deepest of them is death. Walkerton's water contamination brought the universal fear of death into our daily lives.

Walkerton's crisis triggered strong emotional responses as people grappled with the idea that what was coming out of their household taps might kill them. Headlines were heavy with terms such as “sickening,” “disgraceful,” “scandal” and “grossly contaminated.” These reflected common feelings of disgust – a primary emotional response to things we find offensive, including the reminder that we are just animals for whom death is a natural and unavoidable event.

The fear of mortality may prompt us to make irrational choices, believing we are reducing our risk. In Walkerton, fear of tap water became so powerful that the mother of one ill child said, “I wouldn't drink water again if my life depended on it.” Others responded by purchasing bottled water or installing water purification systems in their own homes, declaring that they would continue to use these “cleaner” sources even after Walkerton's municipal supply was once again confirmed to be safe.

Some Walkerton residents simply distanced themselves from the threat. Psychological distancing – declaring, “it can't happen to me” – lets individuals push the perception of life-threatening danger away from themselves. Some residents also distanced themselves physically: they simply left Walkerton until the crisis was over and the media retreated.

But putting mental or physical distance between ourselves and the problem, and letting others handle it, carries a price for society. It undermines local participation in community issues and can make achieving effective and sustained governance even harder.

In other Walkerton residents, fears erupted into public blame directed at perceived villains in the storyline: Stan Koebel, the Walkerton utilities manager; the town's Public Utilities Commission; and the Ontario government. The accused then further redirected responsibility to others involved in the debacle.

Stan Koebel initially denied the E. coli contamination to Public Health inquiries, but then distanced himself by implying that the outbreak was a random event that “no one wanted, no one planned.” The Public Utilities Commission shifted the focus to an intermittent malfunction in the town's chlorination system. Former Ontario premier Mike Harris blamed human error – putting responsibility back on Stan Koebel – not his government's 40-percent cut to the Ministry of Environment's budget or the reductions in staffing, pollution monitoring and environmental enforcement that followed.

Psychological self-defence explains the anger and hostility directed at individuals

# We use cultural and psychological defences to temporarily block death reminders, and reassure ourselves of our significance and self-worth.

and organizations. We are all intrinsically motivated to defend our worldview, and our positions within that worldview, and react negatively toward people who undermine it.

Canadians normally don't think twice about our water being safe to drink – it is a reflex within our larger sense of security. The belief rests in turn on a generally accepted worldview about the sociopolitical, economic and technical order supporting our national well-being. Abundant, clean and safe water, along with assumed traits like honesty and trustworthiness, has been valued as integral to Canadian identity.

When it took so long for the contamination of their water to be recognized and fixed, Walkerton residents felt those values violated, their national identity betrayed. Public figures were heckled in person and pilloried in the media. Those seen as champions for the worldview were praised. Dr. Murray McQuigge, the medical officer of health, was heralded as a whistle-blower for issuing Walkerton's first boil-water advisory.

### Emotions and Water: What Next?

We think the contamination of one small town's water supply resonated deeply in Canadians' public consciousness for three reasons.

First, it directly contradicted our shared national identity as inhabitants of a place with pristine, abundant water. Suddenly, images of tanker trucks and goodwill shipments of thousands of plastic water bottles arriving in Walkerton provided visible evidence that our water wasn't always clean or easily available.

Second, the contamination struck close to home. This wasn't a story from a distant, underdeveloped nation. It wasn't even from a remote and under-served Northern community. It was about a place just three

hours by car from downtown Toronto and people who could have been our neighbours.

Finally, there was death. “Seven people died and over 2,000 became ill.” The phrase was used so relentlessly in media coverage that we might wonder if a keyboard shortcut had been created. And on every hearing it brought forth those deep-seated, subconscious terrors of our own inevitable mortality.

Death, of course, is everywhere. We get reminders daily in our news, our entertainment and communities – even when we glimpse a strand of grey hair in the mirror. But failing to recognize our emotional response can set us off in the wrong direction, as individuals and as a society: buying bottled water needlessly, blaming others rather than accepting responsibility, and rationalizing inaction as we distance or distract ourselves from the problem. All these in turn complicate the collaboration that is necessary to solutions – especially with water, which affects us all.

Death may be inevitable, but our terror response needn't be. Our continuing research will go beyond identifying how fears misdirect our behaviours. With more insight, we'll identify specific tools that decision makers and the public might use to generate clearer thinking about the environmental threats we really do face. [A](#)

Sarah Wolfe is an assistant professor in the Department of Environment and Resource Studies at the University of Waterloo.

Stephanie is a recent graduate from the Masters of Environment and Resource Studies program at uWaterloo.

Hanna Ross will be starting the Master's program in Environment and Resource Studies at uWaterloo this fall.