10 Dangerous Places to Vacation: Why Where You Live, Work or Play Matters for Your Health

By Zachary F. Meisel

Advanced hospital trauma care isn't usually on the list of things most families think about when planning their summer travel. But it might interest them to know just how remote some popular U.S. vacation spots are, at least when it comes to access to the kind of care that saves lives in cases of severe injury.

On Monday, the American Trauma Society released an interactive map that allows users to gauge availability of care across the entire U.S. You can pick a location — searchable by state, congressional district or ZIP code — and figure out whether it falls within a "safety" zone: an area in which you're within 45 minutes to an hour from advanced trauma care, either by ambulance or helicopter, in case of a health emergency. (See pictures of Brooklyn's all-volunteer ambulance corps.)

A glance at the map shows purple blotches of safety concentrated around the coasts and in the Midwest, but alarmingly, broad swaths of the country, particularly rural areas extending from the deep South to the central and mountain zones, lack access to timely, lifesaving care for the most serious injuries.

These white "danger" zones also include some of the most popular tourist spots for Americans, like Maui, Yellowstone National Park, California's Yosemite and Arizona's Grand Canyon. Many lie on the East Coast too: Massachusetts' Martha's Vineyard and Nantucket; New York's Lake George and Montauk; Myrtle Beach, S.C.; and Florida's Key West.

To make matters worse, these zones are associated with higher car-crash death rates, a fact highlighted in a 2009 talk before the American College of Surgeons by Dr. A. Brent Eastman, who has been thinking about trauma systems for many decades. Eastman argued that the problem is part of a larger crisis in access to trauma care in rural America, fueled in part by a growing shortage of medical and surgical specialists in these areas. Two of my colleagues, Drs. Charles Branas and Brendan Carr, are quantifying and testing these time-distance-outcome relationships, and the results are stark: where you live, work and play can make a significant
difference in your health, especially when it comes to unplanned, time-sensitive medical problems. (See why Grey's Anatomy clouds the reality of emergency care.)

Such health problems are different from other medical conditions that unfold over time and allow people to weigh their medical-care options. In these cases, it's clear that access to better care can lead to better outcomes. In contrast, emergent cases involving stroke, heart attack or car crashes are sudden and often deadly — so much so that they seem like "acts of god," those whose fated outcomes seem unlikely to be influenced by mere medical intervention.

But that's the wrong perspective. Medical science has worked hard to overcome this bias and to prevent such deaths: the institution of airbags and seat belts and breakaway signposts, which research shows save lives, has helped make cars and roads much safer than they used to be. Likewise for heart attacks and strokes: we treat risk factors like elevated blood pressure and cholesterol in order to prevent sudden catastrophic events. Yet once these events occur, we are learning that location matters in who gets specialized and timely treatment. That, in turn, influences who walks out of the hospital alive and who does not.

The next step is to figure out how to get everyone rapid access to the time-sensitive treatments that we know work. For victims of severe injury, this means rapid access to specialized surgical care; for those with certain types of heart attacks, this means being able to get to a cardiac center with a 24/7 angioplasty lab; and for victims of stroke, it means getting rapidly to hospitals that have expertise in delivering clot-busting drugs. Making this happen will require better coordination of hospital and emergency-medical-services systems on a regional and national level. (See pictures of Cleveland's smarter approach to health care.)

To be clear, most medical emergencies (even injuries) don't need immediate, specialized care provided by trauma, stroke and cardiac centers. But many do. I suspect that people who live in northwestern Wyoming understand that getting to a specialty hospital quickly for complicated medical problems might not be feasible. Perhaps it's a trade-off they are willing to make in exchange for open land, open roads and tight-knit rural communities. Regardless, it's just not fair. Everyone should have equal access to specialized trauma care when they need it, whether they're full-time residents of rural America or urbanites going to Yellowstone National Park this summer with their families.

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