

Population Health Perspective on Workplace Safety in the United States: How do we compare with other nations?

Thank you for choosing me to deliver some remarks on Worker Memorial Day, which recognizes people who died while on the job. Being asked to do this talk appealed because I wanted to investigate how many people died on the job in the US compared to other countries. That is what I do, compare various outcomes in the United States with other nations, both rich and poor. There aren't really any nations richer than we are so my comparisons are mostly with other countries who are pretty well-off but not as rich as we are.

What do I find? We have the most prisoners of any country and the highest incarceration rates, namely we house a quarter of the world's prisoners. Pretty impressive, I'm sure you will agree. We also die younger than people in the other rich nations. Quite substantially younger, and for some mortality indicators we die before people in quite a few poor nations. As someone who worked as an emergency physician, for thirty years I found the easiest diagnosis to make in the ER was that someone was dead. Hence I have focused on mortality as the indicator of importance. We have homicide rates in some of our cities as high as the highest homicide rates among countries in the world. Perhaps we should rejoice, but I'm hoping you are not one of the delighted in this killer fact.

If we forget death, then we appear to have the most mental illness in the world, and teen pregnancy rates that rank with some of the highest in the world. If we don't look at deaths and other measures of health, about the only thing we can gloat in being the highest in the world is spending the most on health care. Eighteen percent of our economy is directed towards health care spending, which represents almost half of the world's total health care bill. This is clearly not buying us health, however you conceive it.

What about deaths at work? Surely we don't do so badly there, as we have all these safety standards and OSHA to protect us. WRONG. Let's leave aside homicide in the workplace where we excel. It turns out we likely have the highest rates of worker deaths of any rich country. It is more difficult to make pronouncements about poorer nations since there aren't good data for comparisons.

I choose workplace deaths because comparing other measures of injuries is difficult.

Let's start with the Organization of Economic Cooperation and Development or OECD countries, the richest in the world. The range of fatal accidents range from 1 to 12 per 100,000 persons in the workforce. Per ten thousand accidents, deaths range from 9 in Germany to 3252 in Turkey for data in the mid 1990s. United States was not the worst in this tally but not doing so well with about three times as many deaths as Germany.

Those were data from about fifteen years ago, so how about more recently? In 2010 if we exclude deaths due to highway motor vehicle crashes and those due to violence, we find that the United Kingdom has a third of the US rate of deaths. Note that we are talking about rates in all these comparisons, namely the number of deaths per worker, rather than just counting the total. If we look at the construction industry alone, the number of four times higher than in the UK. If we had the UK rate for construction fatalities three hundred worker lives would be saved each year. I doubt there is any doctor who can claim to have saved 300 lives in a lifetime.

Similar findings are there for other countries in the European Union. The study published in the American Journal of Industrial Medicine last year by researchers at the University of Pittsburgh and RAND suggested the lower rates were associated with high-level management attention to safety

issues and in-house preparation of risk assessments there. They pointed out that fatality rates had declined faster in the UK and in the EU than in the US. The reason they left out the violent deaths in their analysis was because there were so few in the UK compared to the US that it would make the United States look even worse. That is they wanted to look at the traditional set of fatality causes rather than look at shootings or military deaths which is an obvious occupational hazard. Too many in the US want to kill their boss and the boss wants to kill the workers. Or there are school shootings or those at hospitals and medical centers. The study did look at violence caused by non-human animals, however. A zoo keeper being attacked by an elephant for example. Highway crashes were similarly not counted since we have such high rates compared to the Europeans. I think there was an implicit bias in American researchers wanting us to look at good as possible. We have only three to four times the fatality rate of the United Kingdom.

We don't look good today, but back in the 1980s in a study comparing work-related fatalities in the US, Australia and New Zealand, we had the best outcomes among those three nations. Something has changed. Another study comparing the US and the EU nations from fatalities from 1995 to 1998 found US rates higher than EU nations, but not as high as what I reported above in 2010.

What is going on in the US to contribute to all of the excess deaths?

Certainly there is less regulation in the workplace, less oversight by OSHA.

There is increasing stress in the workplace as well. Stress is the 21st century tobacco. We in this country report some of the highest levels of stress of all nations. This despite all the wonder technology we have to make life easier. No doubt you are all salivating to get an iWatch. Will it decrease the amount of stress in your lives.

Many more people are sleep deprived and more likely to have an accident. Studies have demonstrated this in women who are now called upon to do so much more than ever before. Besides being loving wives, devoted soccer moms, with the looks of a super model and the physique of a jock, now they have to be successful in the career world and they have to be porn stars. Too much is expected of them in the United States. We men, however, are the same old jerks we've always been. Nothing more is expected of us. It is tough being a woman in the USA.

Another factor is poverty. Poorer people have more occupational injuries. We have the highest poverty rates of all rich nations, so that shouldn't surprise us.

We are here today to note that 90 workers died in Washington State last year together with 15 in King County. If this had been in the United Kingdom, perhaps the numbers would have been a third to a quarter of that. What are they doing there that we could learn from?

One thing is that England had a headstart when the father of occupational medicine, Charles Turner Thakrah wrote in the 1832 "Most persons, who reflect on the subject, will be inclined to admit that our employments are in a considerable degree injurious to health, but they believe, or profess to believe, that the evils cannot be counteracted, and urge that an investigation of such evils can produce only pain and discontent." At the height of the industrial revolution in England the Factories Acts established local system of voluntary factory inspection but soon they changed the act to give inspectors the right to enter factories. They have continued to stress safety in the workplace establishing the 1974 Health and Safety at Work Act with strong government supervision of workplaces. By 2011 fatal injuries to employees have fallen by 82%. Our improvements, especially now that we don't support government regulation so much, have languished.

In 2011 in the US the occupations with the highest fatal work injury rates were fishers, followed by logging workers. Then aircraft pilots and garbage collectors, then roofer followed by structural iron & steel workers, then agricultural workers and power-line installers.

When we count workplace deaths in the United States, which numbered some 5657 in 2007, we are only counting the acute injuries. We don't look at the long term exposure to various environmental issues. If we estimate deaths from respiratory diseases, cancers, circulatory problems and kidney disease we come up with about 53445 for 2007, almost a tenfold increase. That is the real burden, but since there is typically a long time from the exposure to the environmental hazard and death, it doesn't get counted. And the costs of caring for these conditions is typically born by the worker who may not then have health care insurance. I shudder to think of the way we shift costs from the rich who employ these people and the workers themselves.

The data also show an increased fatality rate for Latino workers compared to all US workers. It is also higher for contract workers who include various temporary workers and those working for another firm. We have also seen a doubling in fatal injuries to workers under the age of 16.

What needs to be done so that our workers don't die at work in the numbers they do? Remember I started off talking about our high rates of death compared to people in the other rich countries, numbers that apply to all of us. We seem to excel in this country at being dead first. If on your deathbed you remark: "thank god I lived a shorter life, I wouldn't want to have lived a longer one" then you will be well-rewarded. How many of us would say that? We spend more money on medical care in the last few years of life than at any period beforehand suggesting we do want to live longer. We need to put in place the same that will make us live longer healthier lives that will also have the unintended benefits of our workers having less on the job mortality.

The Institute of Medicine, our country's highest functioning think tank, produced a report in 2013 titled: US Health in International Perspective: Shorter Lives, Poorer Health which laid out what I have said today. Their recommendations are appropriate for us today. The first task was to inform the public that our health isn't so good compared to other rich nations. Tough sell in this country, I admit. The second on their to-do list was to look at healthier countries to see what they do that might be of use here.

Let's look at this for two countries, one I've mentioned, namely England, and the other is Australia. The construction industry, which I've been discussing here, is different in the US and the UK. There almost 40% of the workers are self-employed while the figure here is more than half that. Working for the man you are likely to take more risks as jobs are precious and you don't want to get laid off or fired in this economy. There are more rules related to safety in England than here especially to prevent falls from high places which are a common cause of death here. Recall a construction worker in downtown Seattle fell to his death over a year ago. Another factor is that working in the construction industry is more stable there than here so people work together, have more experience and likely take less risk. More construction in England is undertaken by the government which has strong guidelines for worker safety. They also have more inspectors and high-level management attention to safety and risk assessment than here. Recall OSHA has been seriously underfunded. And somehow there is a belief that the market will solve these problems. A deadly idea if there ever was one.

What about Australia? One finds a government report from the National Occupational Health and Safety Commission titled: "Fatal Occupational Injuries: How does Australia compare internationally?"

That is something our governments never do here, compare our state with others. I used to think that was what the State of the Union address was. Comparing the US to other nation states. Never done. Their aim was to compare Australia with the best performing nations to see what they could do to improve since they were ranked seventh best. We are far worse than Australia suggesting we need such a report more than they do.

We have made significant progress over the last few years in creating awareness of our huge economic inequality with the Occupy Movement so everyone knows about the 99% and 1%. If the gap wasn't so big, we wouldn't be taking so many risks to make ends meet. Seattle surprised the country by passing a \$15 minimum wage and businesses such as MacDonaldds and Walmart are taking steps they wouldn't have dreamed off even a few years ago. The demonstrations this year demonstrating that black lives matter have made an impact. Even closer to home is the Reclaim UW movement fighting to stop tuition increases, more pay for TAs. They managed to disrupt a UW regents meeting earlier this month. Is there a movement towards a revolution in the air as I recall back in the 1960s when students didn't want officer recruitment on campus and forced several universities to shut down? I hope so, as this is what democracy looks like our slogan back in 1999 during the Battle of Seattle. What we need to learn in this country is that strong government responsible to we the people, not Facebook or Google or Microsoft, that puts in place policies to create economic justice will make us healthier and our labor force have fewer workplace deaths. It is a win-win situation.

We need changes at the national level in the US. Let me end with two quotes from one of my heros, Howard Zinn, the historian who wrote A People's History of the United States:

“What matters most is not who is sitting in the White House, but "who is sitting in" -- and who is marching outside the White House, pushing for change.”

"We don't have to engage in grand, heroic actions to participate in the process of change. Small acts, when multiplied by millions of people, can transform the world. "

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