

Mitchell's Musings 11-3-14: The Ebola Free Ride: Look at the Incentives

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It may be old hat to analysts of labor, management, and human resources generally, but a good rule when there is perverse behavior is to look at the incentives. However, what seems to be an obvious point seems to have escaped public policy discussions regarding Ebola. Ebola in the past was a relatively obscure disease that would occasionally break out in Africa, but generally ran its course and disappeared. In the last few months, however, it has become an epidemic in several African countries. When Ebola leaked into the U.S. via travelers from affected areas, there was an instant controversy over the appropriate policy response.

Some of the controversy involved guidelines for U.S. hospital workers and other health workers concerning how to handle Ebola patients, and – more specifically – whether the appropriate procedures were used at a Dallas hospital in which two nurses contracted Ebola from a patient. Another controversy arose over whether the guidelines in use themselves were appropriate from a technical standpoint.

However, the most visible controversy has developed over the treatment of travelers from afflicted countries, including returning American health workers who were assisting in efforts to try and contain the epidemic within Africa. Because Ebola is often fatal, various politicians proposed bans on travelers from afflicted countries or proposed quarantines of such travelers for an extended period while it was determined whether they in fact had the disease. The quarantine approach is complicated by the fact that the incubation period for Ebola can be as long as 21 days (reportedly).

The most recent controversy involved a health worker who was quarantined by the State of New Jersey on orders of Governor Chris Christie. Since Governor Christie is a likely presidential candidate in 2016 and a Republican, you might view his action as both “political” and “conservative.” But my home state California, which has a Democratic Governor sure to be re-elected to a fourth term and one who is not at all likely to be a presidential candidate is also imposing quarantine procedures.¹ That fact suggests that there is an incentive for states to move in the same direction, regardless of politics.

The official response from Washington – including from President Obama – has been a combination of pointing to irrational fears about Ebola and noting that unless the epidemic is quelled in Africa, there will inevitably be some leakage to the U.S. The argument goes on to point out that quarantines might discourage health workers from going to Africa.² In effect, discouraging health workers from going to Africa is ultimately bad for the U.S. because of the

¹<http://www.latimes.com/local/california/la-me-ebola-california-20141030-story.html>

²<http://thehill.com/homenews/administration/222254-obama-we-cant-beat-ebola-by-hiding-under-the-covers>

leakage problem. So far, at least, that argument has not stopped states from moving on their own. The health worker who was held in New Jersey went to Maine after being released and that state tried to impose new quarantine restrictions on her there.

Let's note that we don't actually know the degree to which state quarantine restrictions might discourage health workers from going to Africa. And let's concede that vastly more Americans will die of – you name it – traffic accidents, flu, etc., than will die of Ebola under any scenario, i.e., that people are not very good at weighing probabilities related to relative risks. Putting all those considerations aside, let's look at incentives for individual state action and the classic free rider problem.

Consider the California case. California has a little less than one eighth of the U.S. population. It may well have more than one eighth of relevant health workers so let's go with the assumption of a fourth of relevant health workers are in the state rather than an eighth. If California has one fourth of relevant health workers and imposes quarantine restrictions, presumably its action has no disincentive effect for the other three fourths who might go to Africa. And even the one fourth in California could escape the California quarantine by returning to another state. Or they might go to Africa despite the restriction.

Therefore, by imposing a quarantine, California – the largest state in the U.S. – has perhaps a one fourth impact on the number of U.S. health workers going to Africa. It has a relatively small effect on the health benefits to Africans (who – let us crassly note – are not residents of, or voters in, California). Some of the discouraged California health workers may be replaced by those in other states or nations. California thus has little effect on any leakage back to the U.S. of African Ebola. And if there is leakage, the leaks have something like a three fourths chance of ending up in another state.

In effect, California is a free rider or close to it. It can get whatever benefits a quarantine might have on the state (even if those benefits are non-medical reassurances felt by the local population). The costs it imposes on other states – a somewhat elevated probability of a leak from Africa – are very small and maybe almost nil. So the incentives line up in California for imposing a quarantine. And, indeed, each individual state when considering its Ebola impact, can make the same calculation. The smaller the state, the less its policy matters.

The remedy is obvious, though probably difficult to implement in practice. If each state acts alone and follows the same incentives, there will be quarantines everywhere. The impact on health worker willingness to go to Africa could be substantial as more states adopt restrictive measures. And the result could be an elevated risk of leaks of Ebola back into the U.S.

In short, there is a *collective* interest, according to the argument made by federal authorities, in not imposing arbitrary state quarantines or similar measures. But there isn't an *individual* state interest. Ergo, the federal government needs to have pre-emptive authority to act in the collective, national interest. That would be the optimum policy solution. It applies whenever

collective action is needed in the collective interest but individual incentives do not align with those of the collectivity. Ebola is a textbook example.

Of course, there are cases in which free rider problems are resolved by pure exhortation to do good for the collectivity, such as federal authorities are currently trying with their plea to the states. Public radio, for example, has the free rider problem; you can receive the broadcast signal whether you support the station financially or not. Through pledge drives and other enticements, however, some listeners are induced to pay for the station even though the rational economic choice for the individual is to free ride, i.e., not to pay. It's hard to get numbers of the proportion of listeners who are induced to pay. I found one article which said one-in-ten listeners respond to appeals to pay.³

That proportion is apparently sufficient for supporting public radio. So possibly some state governors will pay attention to the feds and refrain from automatic quarantines. Perhaps the public will be calmed enough by presidential assurances that governors won't feel pressure to act.⁴ Maybe, after Election Day, the federal exhortation approach will thus prove to be sufficient. If it isn't enough, the feds will at least have to try to produce a policy that provides more central authority than now prevails.

³<http://www.forbes.com/2001/03/30/0330pubradio.html>

⁴<http://www.latimes.com/opinion/op-ed/la-oe-mcmanus-column-ebola-politics-20141029-column.html>