Weekly Checkup

Vaccines Save Money: Lessons From Texas

MICHAEL BAKER | AUGUST 22, 2025

This week, Texas officially declared the end of its 2025 measles outbreak after recording 762 cases, 99 hospitalizations, and two deaths. Since measles is an avoidable, vaccine-preventable disease, **it seems wise to build on previous analysis I have done and estimate how much this outbreak cost – and how much less it would have cost if appropriate vaccination had occurred.**

There are three buckets of costs that are incurred by a disease outbreak. There is the direct medical cost of getting measles (patient bills and insurer payments), the indirect costs associated with a measles case (lost productivity from illness, quarantine, and caregiving), and finally the cost of health departments responding to a case (contact tracing, clinics, and surge staffing).

To approximate the direct medical costs, I used values cited in the most recent complete U.S. measles cost study, Societal Costs of a Measles Outbreak. In the study, originally published in *Pediatrics*, the authors reported reimbursements of $4,032–$46,060 per hospitalization and $88–$526 per outpatient visit. For a cautious estimate, I applied the midpoints of those ranges to Texas' cases (99 hospitalizations and 663 non-hospitalized) and then indexed that to 2025 dollars with the Medical Care CPI. Result: $3.2 million.

The same analysis estimates $14,297 per case in productivity losses in 2019 dollars (this includes time lost from sick patients, quarantined contacts, and caregivers). **Updating that amount with the Employment Cost Index (ECI) through Q2 2025 yields $18,005 per case. That number is then multiplied by the 762 cases Texas documented. Result: $13.7 million.**

Public health responses are somewhat difficult to quantify. Across 2004–2017 U.S. outbreaks, the median public health agency response cost was $18,787 per case. **Scaling**

that to 2025 with the ECI gives $24,320 per case. Again, we multiply that by the 762 documented cases. Result: $18.5 million.

So, putting it together:

- **Direct medical care: $3.2 million**
- **Indirect societal losses: $13.7 million**
- **Public health response: $18.5 million**

All told, that's a cool $35.4 million. To be clear, these are not audited totals. Still, the data provide a solid basis for estimation, policy planning, and after-action analysis.

Was all this cost avoidable? Some may say "no" – this is simply the cost of doing business. But what if the people exposed to measles that they then contracted had been vaccinated? We know that vaccination can generate enormous return on investment. **Let's quickly estimate the cost of vaccinating all the individuals who contracted measles.**

We don't exactly know what the insurance status is of every person who contracted measles, but we can generally put them into two buckets: the private insurance market or a public insurance market (Medicaid, uninsured, etc.). Regardless, the MMR vaccine – which inoculates against measles – is very accessible to anyone, either through a standard insurance plan or the Vaccines for Children (VFC) program. The VFC program ensures that the MMR vaccine is accessible to any child, regardless of insured status. **The table below shows the relevant costs of the vaccine and the administration of the shots.**

Vaccination Program	Cost of Vaccine	Dose 1 Administration	Dose 2 Administration	Total	Case Count	Total
Private Market (est.)	$95.20	$25.80	$25.80	$146.80	762	$111,861.60
VFC (Texas)	$26.34	$13.25	$13.25	$52.84	762	$ 40,264.08

Source: Centers for Disease Control and Prevention, Am J Prev Med.

Keep in mind, the table above shows the *total* cost of vaccination. Not per shot. Not per case. **For anywhere between $40,000–$115,000, potentially tens of millions of dollars spent on responding to the measles outbreak could have been saved.**

Examples like the Texas measles outbreak continually prove the value of vaccination. Diseases such as measles can result in chronic health issues and disabilities, which may

significantly reduce lifetime productivity. **Safe, effective vaccines – including the MMR vaccine – can prevent serious illness and death and generate high return on investment through avoided health care expenditures, productivity losses, and response costs. Encouraging vaccination must continue to be a priority for the United States.**