

2016 Presidential Race: Clinton, Trump, Stein and Johnson on Vaccines and Bio-Pharmaceuticals

The final installment of The Genetic Literacy Project's three-part series on the major presidential candidates' views on genetics and biotechnology—human and agriculture—subjects not being addressed during the presidential debates. On October 17, we focused on [crop biotechnology, food, and farm policy](#) and on October 18, we focused on [biomedical research](#).

The consensus among professional medical organizations on the importance of immunization in public health and in favor of mandatory vaccination for school children could not be any stronger. But the pool of presidential candidates does not reflect this. Republican Donald Trump, Democrat Hillary Clinton, Libertarian Gary Johnson and the Green Party's Jill Stein also have differences when it comes to drug issues. Using a combination of explicit positions on their websites, previous speeches and remarks, tweets, and their responses published recently on ScienceDebate.org, we outline the candidates' views on vaccines and the bio-pharmaceutical industry. Support for vaccines, in particular, has emerged as a kind of litmus test of the candidates' science literacy.

Donald Trump: Now supports 'vaccine program' but history of denialism

Regarding vaccination, the Republican candidate appeared to endorse the importance of childhood vaccines in his comments on ScienceDebate:

We should educate the public on the values of a comprehensive vaccination program. We have been successful with other public service programs and this seems to be of enough importance that we should put resources against this task.

But there may be a devil in the lack of detail. Trump did not address whether vaccines should be mandatory, which is the scientific consensus, or clarify his controversial statements on how vaccines should be administered. And he did not address or back away from his numerous prior statements over the years that suggested he was in the thrall of vaccine-denialist beliefs.



Donald J. Trump ✓
@realDonaldTrump

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Massive combined inoculations to small children is the cause for big increase in autism....

3:22 PM - 23 Aug 2012

515 206



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Autism WAY UP - I believe in vaccinations but not massive, all at once, shots. Too much for small child to handle. Govt. should stop NOW!

7:36 PM - 27 Mar 2014

304 315



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I'm not against vaccinations for your children, I'm against them in 1 massive dose. Spread them out over a period of time & autism will drop!

11:10 AM - 4 Sep 2014

578 694



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I am being proven right about massive vaccinations—the doctors lied. Save our children & their future.

9:30 AM - 3 Sep 2014

1,127 898

Each of those statements has been thoroughly refuted by reams of scientific evidence. Simply said, no

matter how they are administered, [vaccines do not cause autism](#). A number of science commentators have reviewed his scientifically ignorant statements, including biologist [Emily Willingham](#), biomedical engineer [Steven Salzberg](#), surgical oncologist [David Gorski](#), and [The Washington Post](#).

On the issue of drugs and pharmaceutical companies, the Republican candidate addressed policy concerns from a political rather than a science perspective. Big Pharma, he has said, is big business. He has vowed to renegotiate the prices Medicare pays for drugs, arguing that pharmaceutical companies have been let off the hook by policymakers addicted to campaign contributions. He has also argued for allowing cheaper pharmaceutical drugs manufactured abroad to be sold in the United States.

Jill Stein: Backs away from full-throated endorsement of vaccine safety

A graduate of Harvard Medical school and now retired, the Green Party standard bearer might be expected to be a champion of consensus science, but not on crop biotechnology and perhaps not on vaccines either. “Dr. Jill Stein has repeatedly articulated her support for vaccinations in interviews and online,” noted [a statement](#) released during the summer by her campaign. But the statement notably did not contain a definitive statement from Stein herself. Rather, it deflected to the issue of the conspiracy she believes exists between regulators and drug companies: the “corrupting influence of the pharmaceutical industry in regulatory agencies and government in general.”

In May, Stein went on [Reddit to discuss her science views](#), accusing the regulatory system in the US of corruption:

So the foxes are guarding the chicken coop as usual in the US. So who wouldn't be skeptical? I think dropping vaccination rates that can and must be fixed in order to get at the vaccination issue: the widespread distrust of the medical-industrial complex.

When she was asked by the *Washington Post* to unpack that statement, she said:

I think there's no question that vaccines have been absolutely critical in ridding us of the scourge of many diseases — smallpox, polio, etc. So vaccines are an invaluable medication. Like any medication, they also should be — what shall we say? — approved by a regulatory board that people can trust. And I think right now, that is the problem. That people do not trust a Food and Drug Administration, or even the CDC for that matter, where corporate influence and the pharmaceutical industry has a lot of influence.

Unpacking this reveals a few things. Stein is implying that perhaps policies surrounding mandatory vaccination are corrupted and misguided—a favorite claim of anti-vaxxers—Stein’s warning about corporate influence in the vaccine approval process is often voiced by “anti-vaxxers.” As the Post noted in its story, “[most members](#) of the Vaccines and Related Biological Products Advisory Committee work at academic or medical institutions, not drug companies. But for Stein, the fact that people saw corporate and lobbying influence running rampant meant that some skepticism was warranted.”

When asked point blank whether vaccines were safe, she said that after talking to medical experts she did not know:

There were concerns among physicians about what the vaccination schedule meant, the toxic substances like mercury which used to be rampant in vaccines. There were real questions that needed to be addressed. I think some of them at least have been addressed. I don’t know if all of them have been addressed.

Stein often tries to deflect the vaccination safety issue by pivoting to concerns about the pharmaceutical industry. In this video, when responding to what she calls ‘anti-vax smears,’ she bizarrely justifies her skepticism about vaccines and drug companies by citing Monsanto, which she claims has teams of “lobbyists [who] help run the day in those agencies and are in charge of approving what food isn’t safe.”

In late July, in the midst of a drumbeat of negative publicity about her vaccine-related comments on Reddit and the day after the damaging *Washington Post* story, Stein was directly challenged on Twitter:

Hey [@DrJillStein](#), do you believe vaccines cause autism?

— colin meloy (@colinmeloy) [July 30, 2016](#)

Stein’s reply tweet: “There’s no evidence that vaccines cause autism. Let’s do more to support autistic people & their families.” She or a staff member must have quickly realized that this tweet would send shock waves through the anti-vax community, well represented in the Green Party, because five minutes later she deleted it and posted:



Dr. Jill Stein ✓
@DrJillStein

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I'm not aware of evidence linking autism with vaccines. Let's do more to support autistic people & their families.

[twitter.com/colinmeloy/sta...](https://twitter.com/colinmeloy/status/720000000000000000)

4:59 PM - 31 Jul 2016

610 1,323

Back to muddling the issue; somewhere in those intervening minutes, she decided her initial response conveyed too much certainty.

Gary Johnson: Recent change of mind in support of vaccines

Five years ago, Johnson tweeted the following:

No to mandatory vaccines

— Gov. Gary Johnson (@GovGaryJohnson) [September 13, 2011](#)

Based on his recent response to the vaccination question in Science Debate, however, he has changed his mind and now supports the consensus science:

We believe the current legal infrastructure regarding vaccination is basically sound. There are currently no federal vaccination requirements, leaving those requirements largely to the states and school districts, consistent with the legal requirement that children attend school. However, if a national or regional outbreak of disease presents a threat to the general population, the Federal Government has the obligation to assist, and if necessary, impose science and medically-based requirements.

We also need better and greater international engagement in dealing with international outbreaks. Viruses don't yield to customs officials, and as we've seen with the recent Ebola crisis, a dangerous pandemic is often one international flight ticket away from our country.

Hillary Clinton: Evolved to unqualified support for childhood vaccinations

Clinton now has the clearest and least ambiguous position on childhood vaccinations:

The science is clear: The earth is round, the sky is blue, and [#vaccineswork](#). Let's protect all our kids. [#GrandmothersKnowBest](#)

— Hillary Clinton (@HillaryClinton) [February 3, 2015](#)

She also supports allowing states and school districts to mandate vaccines for schoolchildren. Her endorsement of vaccines on Science Debate is just as vociferous:

Through vaccinations and vaccine science, I am committed to protecting our nation's children, as well as populations worldwide, from infectious disease threats.

Over the last two decades, we have made extraordinary global gains in reducing childhood illness and deaths through expanded use of vaccines and immunization. The number of childhood deaths from infections such as measles, whooping cough, diphtheria, and other diseases has dramatically declined in recent years, in large measure due to vaccination. We still have a long way to go, but globally – with the support of Gavi, UNICEF, the World Health Organization and other international organizations – I will work hard to press for the elimination of these deadly diseases.

At the same time, the recent measles outbreaks in California's Marin and Orange counties remind us that we cannot be complacent with our own nation's vaccine policies. Measles, for example, remains a serious matter, killing almost 100,000 children annually around the world. As president, I will work closely with the talented physicians, nurses, and scientists in our US Public Health Service to speak out and educate parents about vaccines, focusing on their extraordinary track record in saving lives and pointing out the dangers of not vaccinating our children.

But Clinton's views have not always been so unambiguous and grounded in science. During her 2008 presidential campaign, in response to questions from an autism advocacy group, [she wrote](#): "I am committed to make investments to find the causes of autism, including possible environmental causes like vaccines...We don't know what, if any, kind of link there is between vaccines and autism—but we should find out." While her stance on vaccines has certainly changed over the past eight years, [the scientific and medical](#) consensus on vaccine safety has not.

Clinton's views on drug companies echo Trump's populist views although she is less sweeping in her condemnation of pharmaceutical companies. In September, she unveiled a plan to lower prescription drug prices, [charging](#) that some "bad actors" are "making a fortune off of people's misfortune." She said she would leverage the federal government's large purchasing power to influence drug companies to provide higher rebates to Medicaid and would allow programs like Medicare to negotiate with pharmaceutical companies as a single 40 million person entity rather than as a series of smaller groups:

Under my plan, drug companies who want to keep getting federal support will have to redirect more of their profits into meaningful investments in research and development. That will mean more breakthroughs, more good drugs, not fewer.

The recent outbreaks of Ebola, Zika, and MERS are a wake-up call that we must continue to innovate and develop disease countermeasures, which include vaccines. Our scientists have made great progress. Yet there remains a troubling “innovation gap” between early phase vaccine discovery and industrial-scale production and vaccine delivery. And those challenges will only be made far worse if politicians waver on their commitment to a science-based vaccine policy. We need to engage stakeholders across industry, non-profits, foundations, and government to bridge this gap and spur the development of a new generation of vaccines.

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