

# Good Science, Bad Policy

Why Scientific Consensus Doesn't  
Change Policy

By

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# Science contributes to the country

- Tremendous advancements have been made
- Range from every-day to exceptional
- Huge economic impact
- One would expect science to play a heavy role in policy making

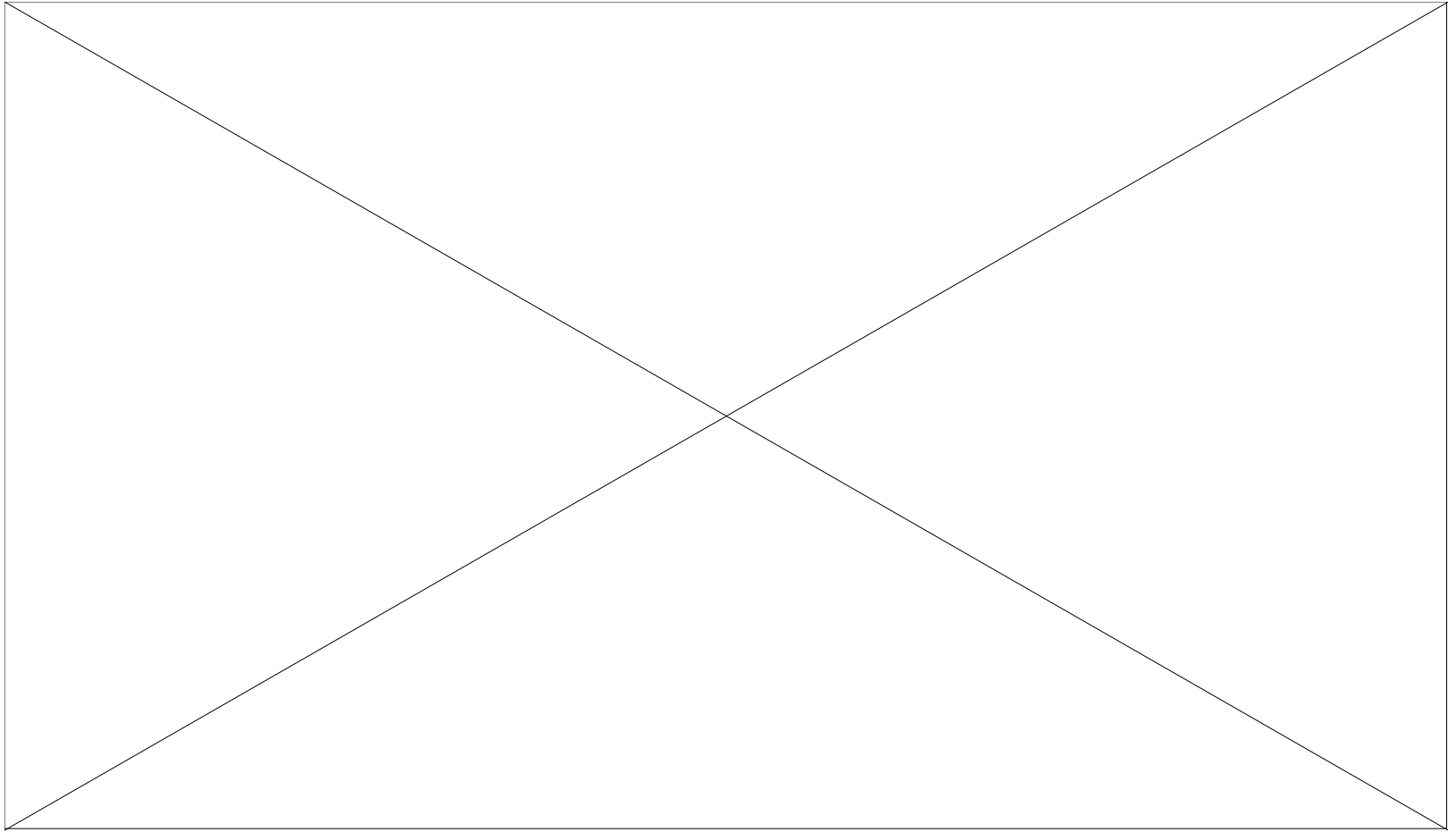
# Some aren't so convinced

- Belligerent denials of scientific consensus
- As a result, policy goes unchanged
- Why, how, and is it fixable?
- Three examples: climate change, vaccination, GMOs

# Climate Change: the Science

- 98% of scientists agree on anthropogenic climate change (NAS)
- Broad scientific consensus on climate change; no debate

# Climate Change: the Debate



# Climate Change: the Debate (cont.)

- Not limited to members of a single committee
- Ted Cruz compared self to Galileo for his denial
- This, and other comments, show lack of understanding

# Scientific Consensus vs. Debate: Why

- Largely partisan issue
- Oil and Gas industry donations to GOP are significant (Open Secrets)
- Vicious cycle of campaign cash and policy positions

# More on the why

- Electoral calculation
- GOP voters less likely to believe evidence of climate change (Pew)
- Polarization has increased (Pew)
- Electoral logic dictates policy position



# How is this allowed to continue?

- Again, electorate dictates policy
- General public swayed by elite cues and economic factors (Brulle)
- General public not swayed by scientific evidence (Brulle)
- Scientific position is weakened by internal debate (Cook)

# How can this be solved?

- Scientific community needs to clarify ongoing dialogue
- Advocacy needs to be targeted at elected officials to elicit elite cues
- Generational factors at play (Politico)

# Vaccines: the Science

- Vaccines function through “memory”
- Vaccines are overwhelmingly safe (Maglione)
- Single best method for preventing disease (NIAID)

# Vaccines: the Debate

- Two Presidential candidates have questioned vaccines
- Gov. Chris Christie called into question mandated vaccines
- Sen. Rand Paul claimed to have seen mental disorders as a result of vaccinations

# Scientific Consensus vs. Debate: Why

- Sen. Paul, Gov. Christie are in the minority
- Vaccines traditionally not a partisan issue
- Corporate interests not at play
- Again, matter of electoral choice- young adults, “anti-vaxxers”

# How does this continue?

- Young voters less impressed by vaccinations (Pew)
- Advent of “Anti-vaxxer” movement
- Untapped veins of voters

# How can this be solved

- Fortunately, this is a simpler problem
- Elite cues can go a long way here
- Broad consensus in policy-makers already exists-it needs to be more apparent

# GMOs: the Science

- GMOs are organisms have been altered to provide some benefit
- Science shows no greater risk from GMOs than regular crops (E.U.)
- Explicit policy suggestions have been made (AAAS)



# GMOs: the Debate

- Numerous states have proposed labeling requirements
- Sen. Bernie Sanders introduced similar language on federal level
- Such requirements are accompanied by talk of the “risk” of GMOs to health

# Scientific Consensus vs. Debate: Why

- Again, a matter of public perception
- Large disparity between scientists and public (Pew)
- Public perception drives policy

# How is this such an issue?

- Misunderstanding of science
- More educated individuals more likely to think GMOs safe (Pew)
- Injection of information from scientific community unable to sway opinion (Brulle)

# How can this be solved?

- Large disparity makes for a difficult problem
- World-wide, GMOs are unpopular
- Elite cues will be important
- Structural economic factors may be even more important (Brulle)

# In General

- Public perceptions are key
- Addressing public perceptions is key to solving overarching problem
- Improvement in education is advisable

Questions?

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