



Public Health
England

Turmoil, Trust and Truth; immunising in today's 'post fact' world

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25th September 2017



Turmoil - a state of great disturbance, confusion, or uncertainty

Trust - believe in the reliability, truth, or ability of

Truth - a fact or belief that is accepted as true



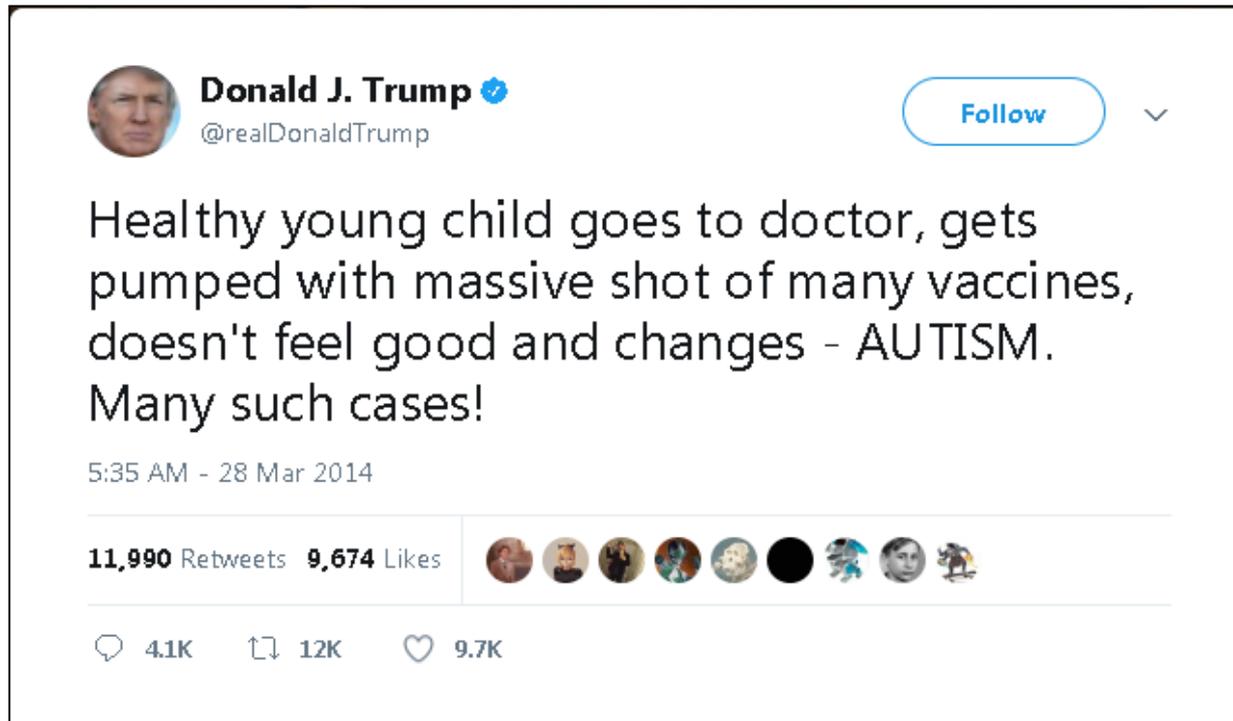
Relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief.

‘we have more data and facts available to us than ever before and yet we have entered a post-fact era’

‘it’s fashionable to blame the Internet for contributing to the post-factual society’



Post-truth politics (post-factual politics) is a political culture in which debate is framed largely by appeals to **emotion** disconnected from the details of policy, and by the repeated assertion of talking points to which factual rebuttals are ignored.





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Turmoil



https://www.google.co.uk/search?q=pictures+of+refugee+camps&tbn=isch&imgil=2KTjnDUeyXbGUM%253A%253B2YxAViE0581eIM%253Bhttp%25253A%25252F%25252Fwww.cofeguildford.org.uk%25252Fwhats-on%25252Fnews%25252Fdetail%25252F2015%25252F10%25252F13%25252Fbishop-of-guildford-backs-calls-for-council-to-increase-refugee-response&source=iu&pf=m&fir=2KTjnDUeyXbGUM%253A%252C2YxAViE0581eIM%252C_&usg=__HACYLWEGbKKG9LpIY4K_IEZlrM%3D



http://www.technologystudent.com/pse_flash/slums1.html



<http://www.poetroom.com/wp-content/uploads/2016/08/Syria-1.jpg>

NEWS ASIA

17 February 2015 Last updated at 16:45

94 Share f t

Four kidnapped polio workers are found dead in Pakistan



Taliban militants oppose polio vaccination campaigns in Pakistan

Four members of a polio vaccination team have been found shot dead in south-west Pakistan, four days after being abducted.

Police said that the bodies of a health worker, his driver and two security

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What must Pakistan

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Features



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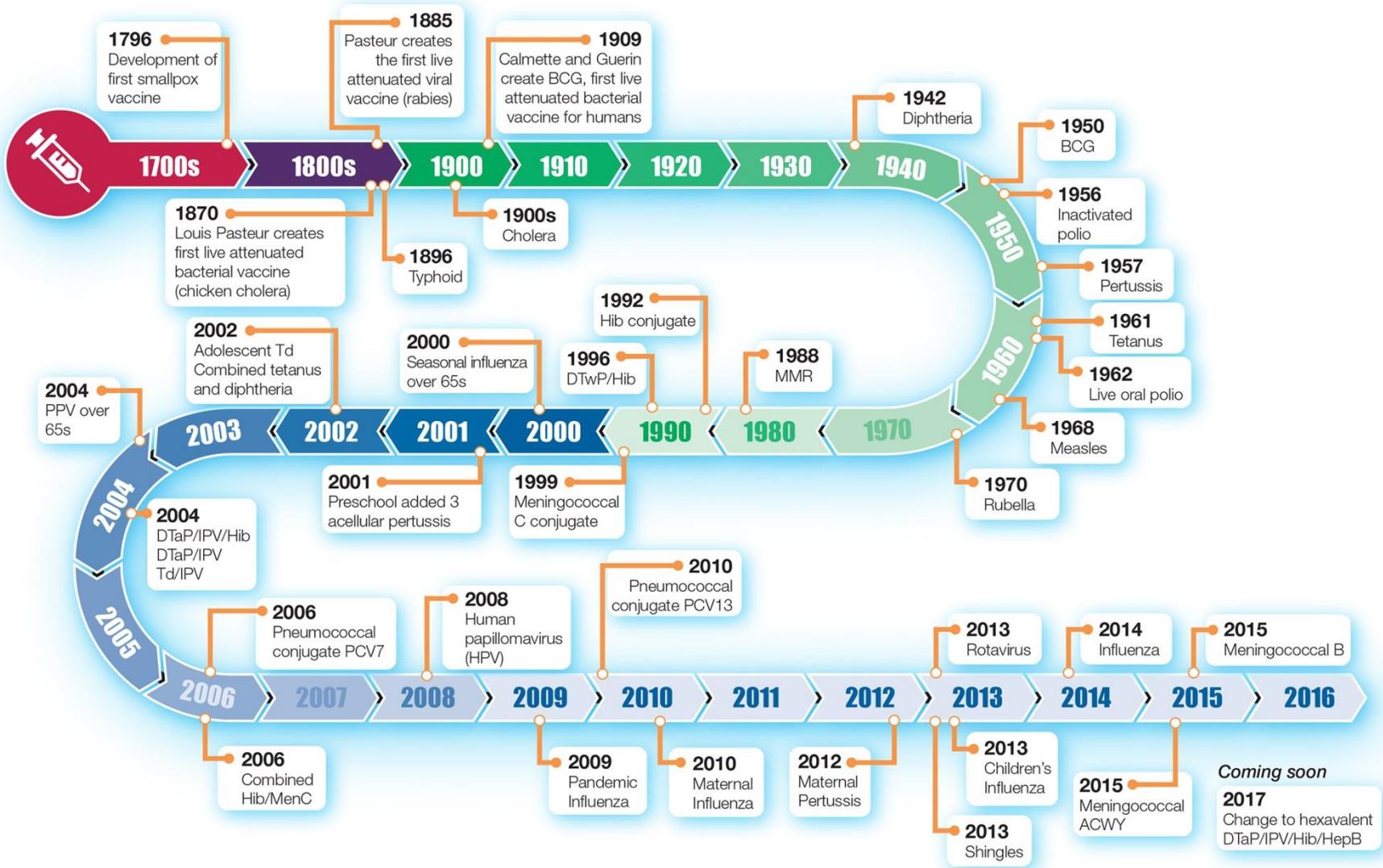
Touch test
The blind breast cancer detectors who find 2mm tumours



<http://www.dailymail.co.uk/indiahome/indianews/article-4896856/Programme-takes-vaccines-children-s-doorsteps-MP.html>



Historical vaccine development and introduction of routine vaccine programmes in the UK



1997 9 antigens

When is the immunisation due?	Which immunisations	Type	Date the immunisation is given
At two months	Polio	By mouth	
	Hib	One injection	
	Diphtheria		
	Tetanus		
Whooping cough			
At three months	Polio	By mouth	
	Hib	One injection	
	Diphtheria		
	Tetanus		
Whooping cough			
At four months	Polio	By mouth	
	Hib	One injection	
	Diphtheria		
	Tetanus		
Whooping cough			
At 12 to 15 months	Measles Mumps Rubella	One injection	
3 to 5 years (usually before the child starts school)	Measles Mumps Rubella	One injection	
	Diphtheria Tetanus	One injection	
	Polio	By mouth	
10 to 14 years (sometimes shortly after birth)	BCG (against tuberculosis)	Skin test followed by one injection if needed	
School leavers 13 to 18 years	Diphtheria Tetanus	One injection	
	Polio	By mouth	

Measles vaccine: Catchvax - one antigen 5, 6, 8 and 16 single shot - ages 1, 10 and 17. MMR2 standard - ages 4, 5, 11, 12, 13, 14 and 16. MMR3 - ages 13, 14 and 16. MMR4 - ages 13, 14 and 16. MMR5 - ages 13, 14 and 16.

Printed in Great Britain 2796 2960 ISBN 0 7521 0993 4





Produced by the Health Education Authority and the Department of Health
 © Health Education Authority 1997
 Travelon House, 30 Great Peter Street,
 London SW1P 2HW
 www.heath.org.uk

2016 15 antigens

Routine childhood immunisation programme from 1st July 2016

Most vaccines are given as an injection in the thigh or upper arm. Rotavirus vaccine is given as drops to be swallowed and influenza vaccine as a nasal spray.

When	Diseases protected against	Vaccine given
Eight weeks old	Diphtheria, tetanus, pertussis (whooping cough), polio and <i>Haemophilus influenzae</i> type b (Hib)	DTaP/IPV/Hib
	Pneumococcal (13 serotypes)	Pneumococcal conjugate vaccination (PCV)
	Meningococcal group B (MenB) ¹	MenB ¹
	Rotavirus gastroenteritis	Rotavirus
Twelve weeks old	Diphtheria, tetanus, pertussis, polio and Hib	DTaP/IPV/Hib
	Rotavirus	Rotavirus
Sixteen weeks old	Diphtheria, tetanus, pertussis, polio and Hib	DTaP/IPV/Hib
	Pneumococcal (13 serotypes)	PCV
	MenB ¹	MenB ¹
One year old	Hib and MenC	Hib/MenC
	Pneumococcal	PCV
	Measles, mumps and rubella (German measles)	MMR ²
	MenB ¹	MenB booster ¹
Two to seven years of age³ (including children school ages 1, 2 and 3)	Influenza (each year from September)	Live influenza vaccine
Three years and sixteen weeks old or soon after	Diphtheria, tetanus, pertussis and polio	DTaP/IPV
	Measles, mumps and rubella	MMR (check first dose given) ²
Girls aged 12 to 13 years	Cervical cancer caused by human papillomavirus (HPV) types 16 and 18 (and genital warts caused by types 6 and 11)	HPV (two doses 6-24 months apart)
Fourteen years old (school year 9)	Tetanus, diphtheria and polio	Td/IPV (check MMR status)
	Meningococcal groups A, C, W and Y disease	MenACWY

1 Only infants born on or after 1 May 2015 are eligible to receive the Men B vaccine, please check with your GP.
 2 Contains porcine gelatine.
 3 Age eligible on 31st August and also including primary school children in the pilots.

Routine childhood immunisation programme 45

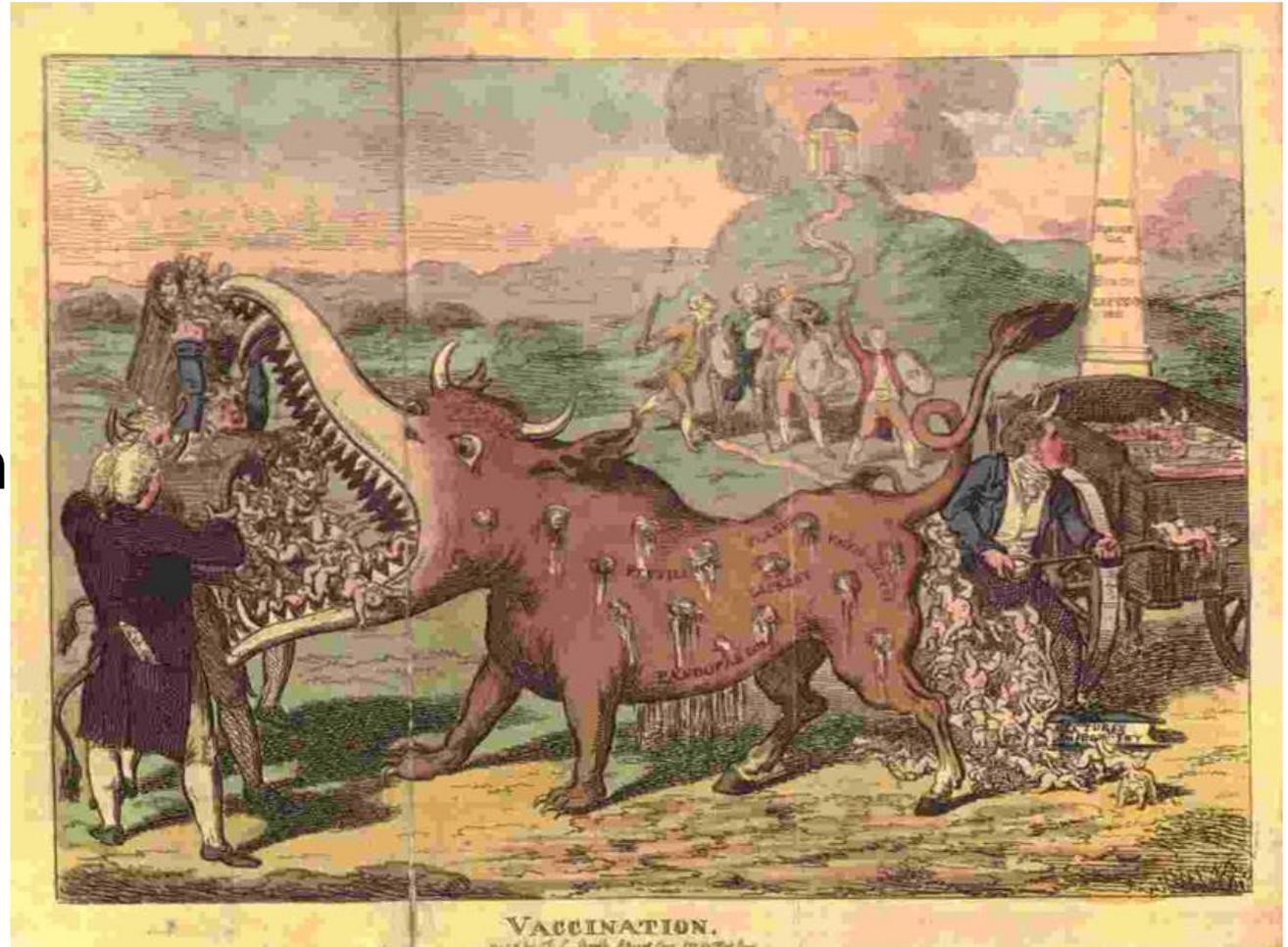
including almost one electronic sharing
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The vaccination monster

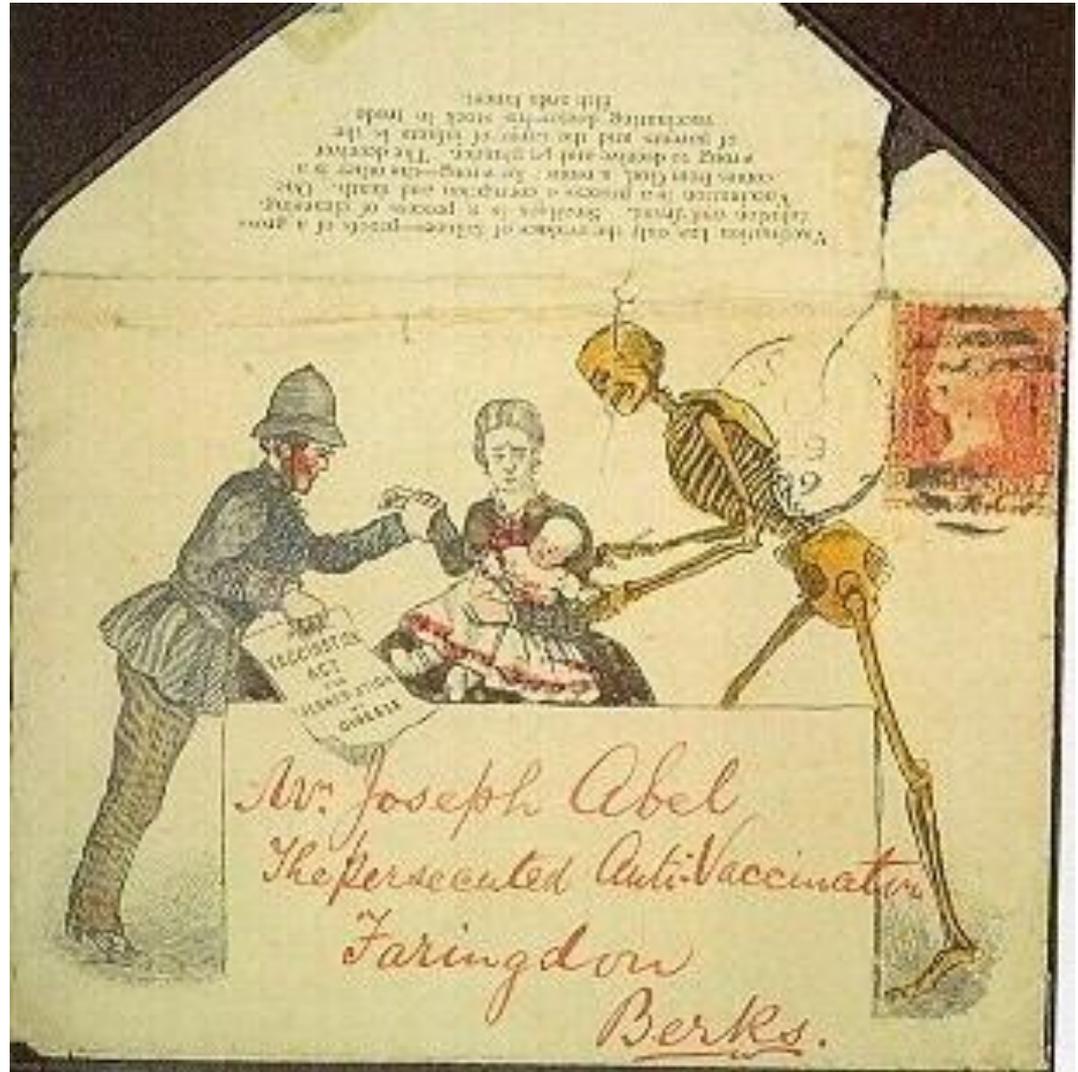


VACCINATION.

Published by T. Agnew & Sons, 15, South Street, London, E.C.



Joseph Abel 1870s





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Vaccinating the Baby,"

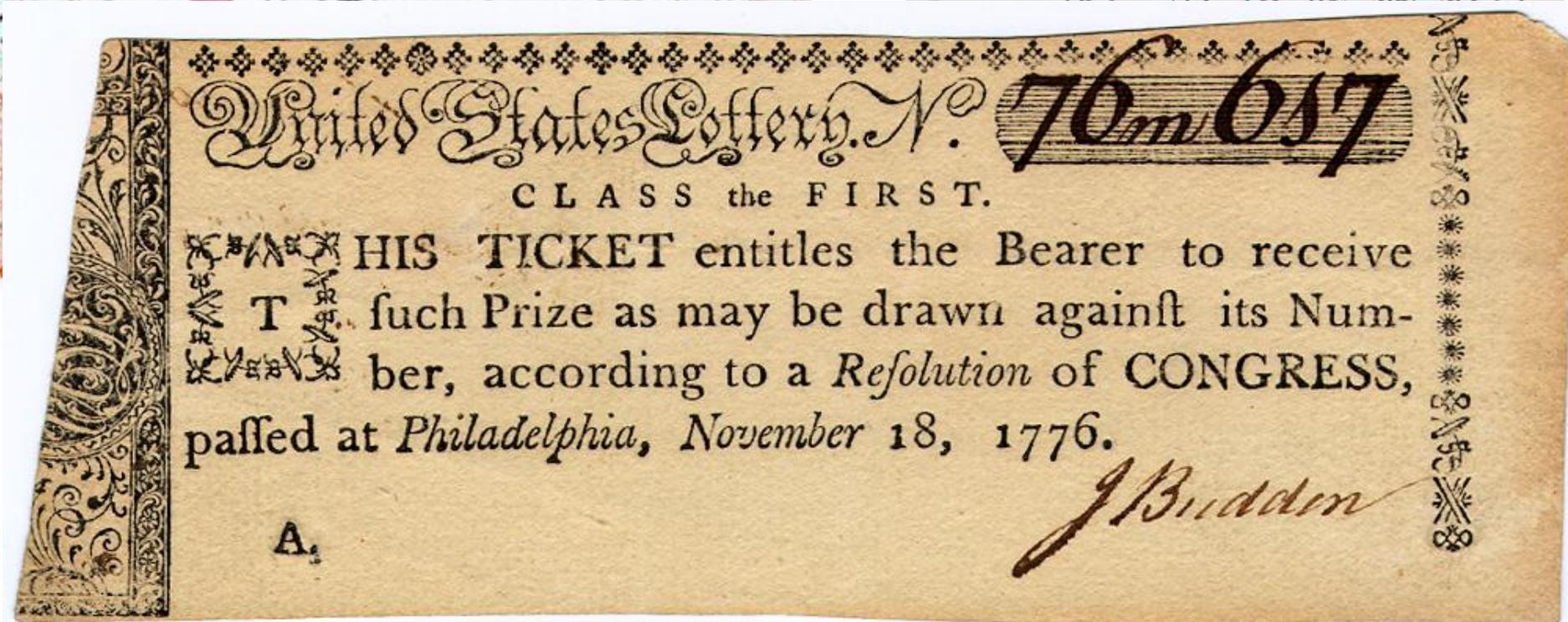
Harper's Weekly, February 19, 1870





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A screenshot of a web browser displaying an advertisement on the iSpot.tv platform. The browser's address bar shows the URL "https://www.ispot.tv/ad/wnms/bexsero-mioms-ag". The iSpot.tv website header includes navigation links for "Products", "Customers", "Free Insights", "Browse TV Ads", and "Watch the iSpot Ad", along with "Log In" and "Request Trial" options. The main content area features a video player with a play button icon. The video content shows a close-up of a person's face with a yellow light reflecting in their eye. Overlaid on the video is the BEXSERO logo, which consists of a blue play button icon above the text "BEXSERO®" in bold black letters, followed by "Meningococcal Group B Vaccine" in red. Below this, the website "BEXSERO.com" is displayed. The Windows taskbar at the bottom shows the time as 14:05 on 11/09/2017.





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Trust



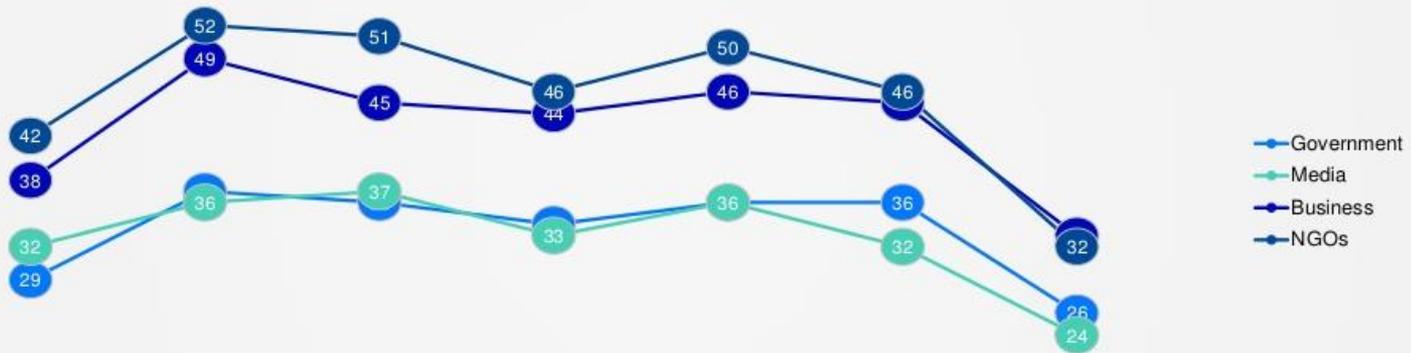
Trust in the UK

Edelman Trust Barometer

JAN

Evaporation of Trust in Past Year in the UK

Percent trust in institutions, 2012-2017



	2012	2013	2014	2015	2016	2017	January Supplement - 2017
Trust Index:	35	43	42	39	42	40	29



Source: 2017 Edelman Trust Barometer UK Supplement Q1. Below is a list of institutions. For each one, please indicate how much you trust that institution to do what is right using a nine-point scale where one means that you "do not trust them at all" and nine means that you "trust them a great deal". [Top 4 Box, Trust] Base: UK General Population (n=1,150)



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Truth



. . . Stephen Colbert has dubbed “**truthiness**”: claims that feel right, even if they have no basis in fact, and which people want to believe because they fit their pre-existing attitudes.

<https://www.newscientist.com/article/mg23231020-500-changing-minds-how-to-trump-delusion-and-restore-the-power-of-facts/>



Let's just establish one fact first: facts are good. They may be uncomfortable, or inconvenient, but only by embracing rational, fact-based solutions can we hope to prosper as a society.

<https://www.newscientist.com/article/mg23231020-500-changing-minds-how-to-trump-delusion-and-restore-the-power-of-facts/>



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MMR The facts

[News](#) [Basics](#) [Library](#) [Resources](#)

Welcome to MMR The facts

This website has been put together to answer the questions you might have about MMR. You can look at the [resources](#) in the [MMR library](#), ask our experts for advice and read up on the [latest news stories](#) related to MMR.

MMR Research

The overwhelming weight of evidence produced by a large number of studies demonstrating this is good for your child.

- [Go to a list of the key studies looking at the safety of MMR](#)
- [Go to a detailed list in the research section](#)

MMR basics

Answers to the questions parents often ask about MMR for their child for their MMR jab.

[Go to the MMR basics section](#)

MMR resources

Leaflets, factsheets, information sheets and more.

[Go to the MMR resources section](#)

MMR the facts



Immunisation Information

Tuesday April 18 2006

Search

The team

MMR news



[18-Apr-06](#)
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[18-Apr-06](#)
[Measles outbreaks in the north-east and London](#)

[18-Mar-06](#)
[Absence of detectable measles virus in blood of autistic children](#)

[18-Oct-05](#)
[New review of evidence supports effectiveness of MMR vaccine](#)

[18-Jul-05](#)
[Are you fully immunised against mumps? - Leaflet](#)

[18-May-05](#)



Narrative bias

“The **more narratives** people read, the **higher** is their **perception of risk**, regardless of the information contained in simultaneously presented **statistical information** on the base rate of vaccine adverse events (VAE). “





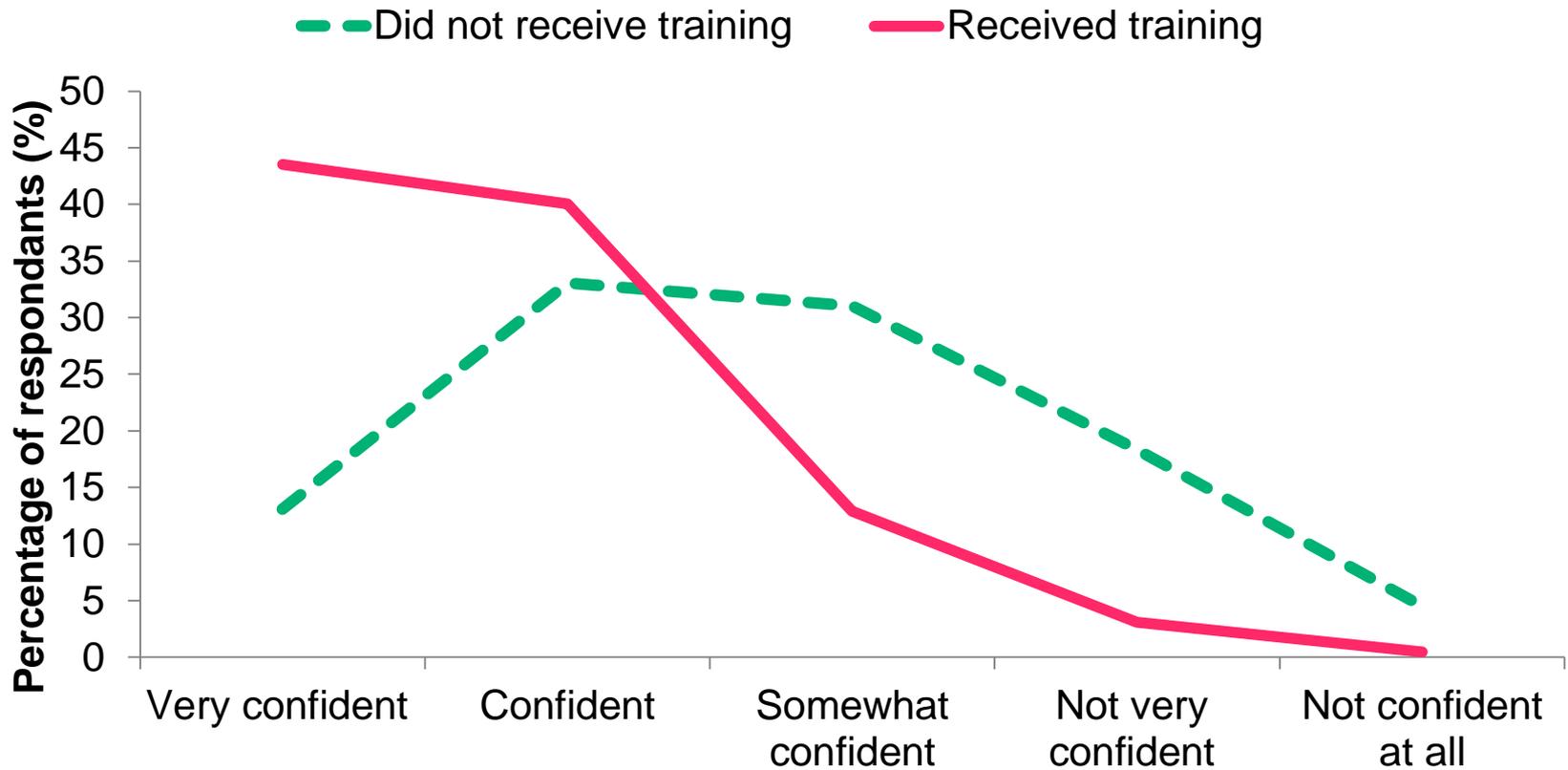
‘ . . . fake news is like a weaponized infectious agent. Immunization through education can help, but it might not be a comprehensive defense.’

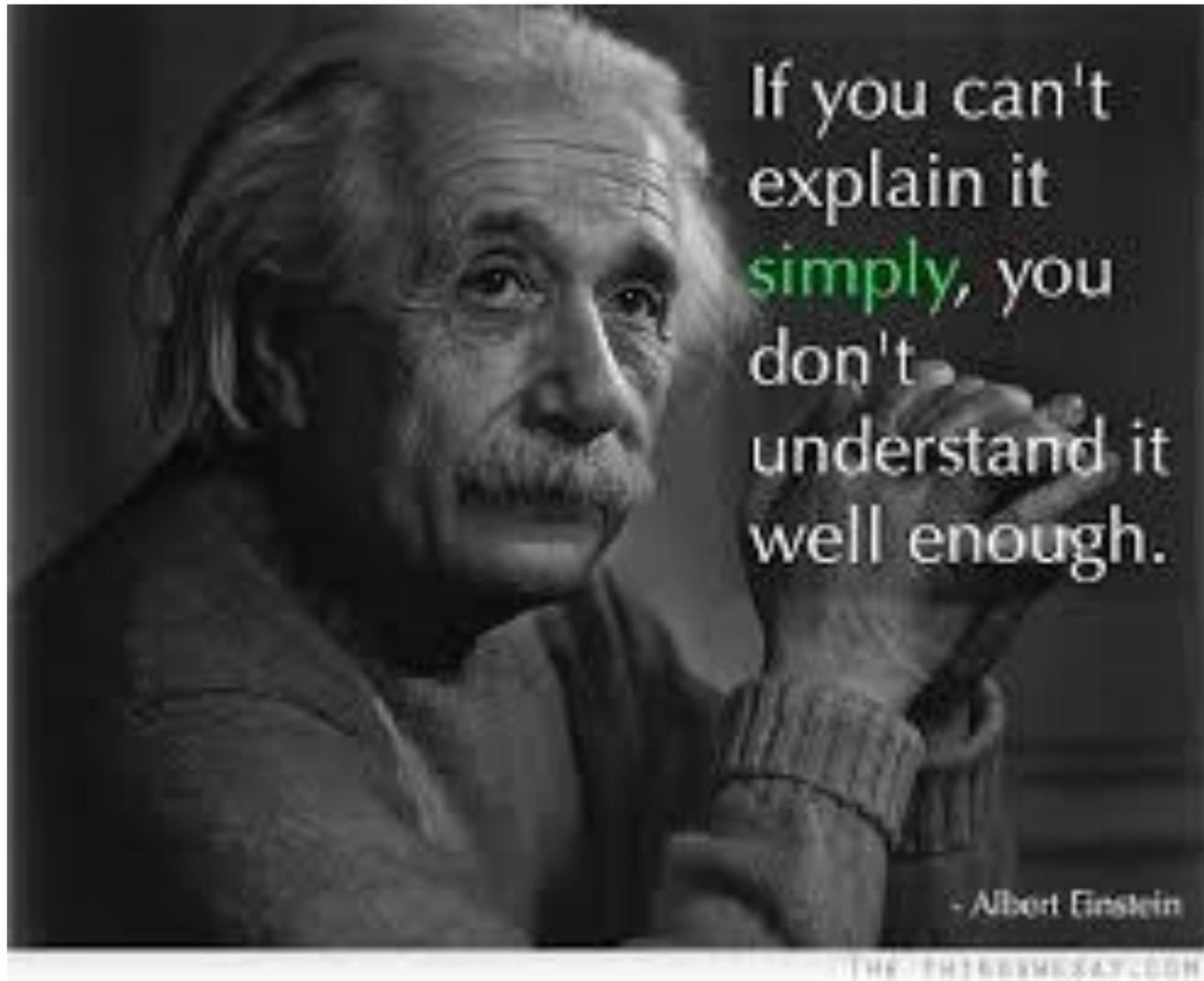
Mark Buchanan

<https://www.bloomberg.com/view/articles/2017-08-31/why-fake-news-spreads-so-fast-on-facebook>



The confidence of HCWs in giving advice to pregnant women according to whether or not they had received training.







Risk: Framing

Burger
contains
25% fat

OR

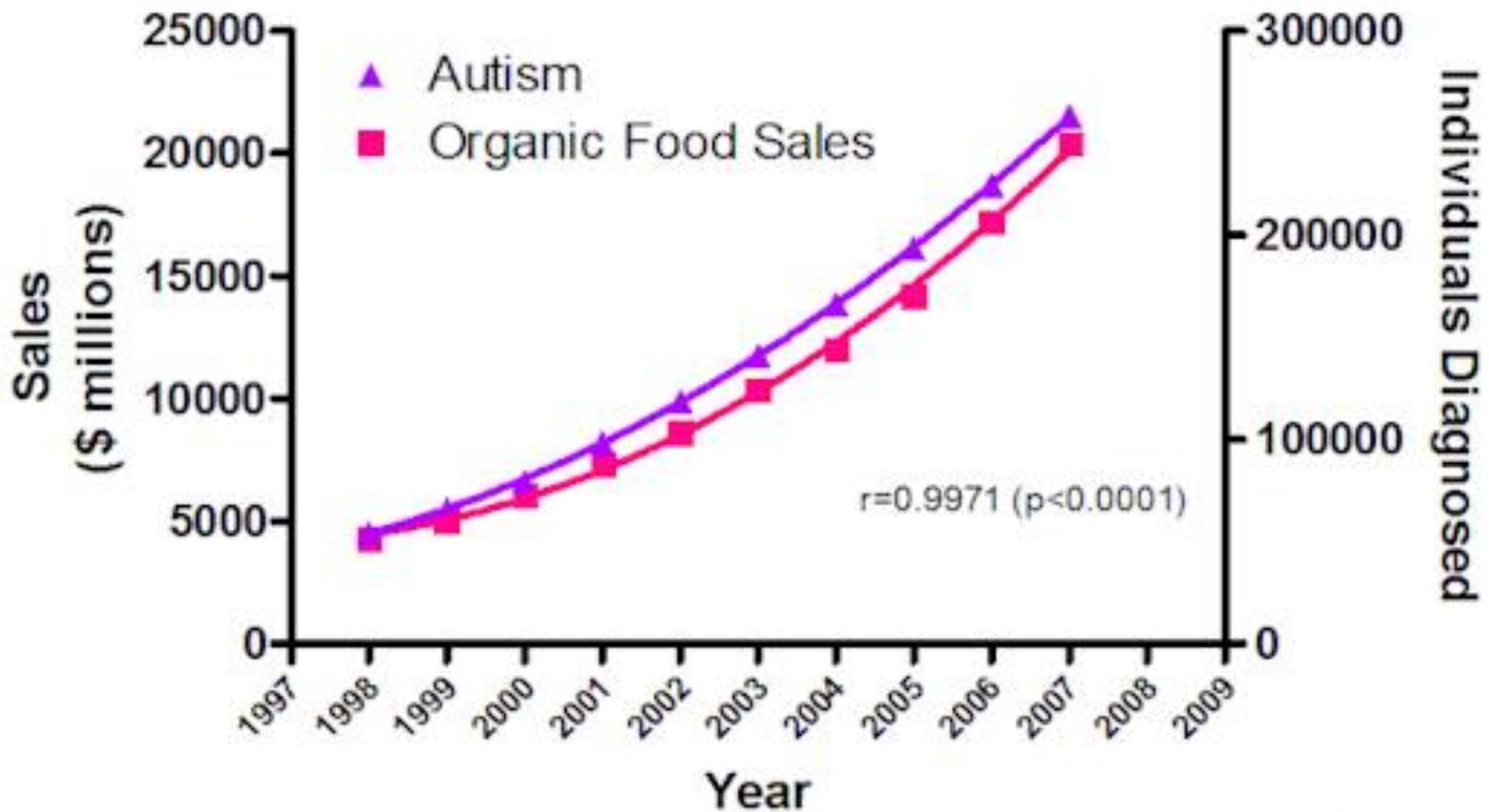
Burger is
75% fat-
free

Vaccination
0.1% Side
effects

OR

Vaccination
99.9% safe

- Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice.



Sources: Organic Trade Association, 2011 Organic Industry Survey; U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS), OMB# 1820-0043: *Children with Disabilities Receiving Special Education Under Part B of the Individuals with Disabilities Education Act



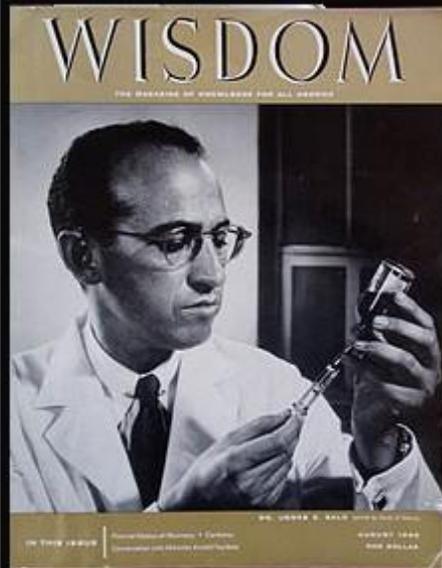
The speaker: verbal aspects

- **Tell the truth**
- **Don't overload**
- **Keep it simple**
- **Repeat your key message**
- **Don't repeat the anti-vaccine arguments**
- **Emphasize high safety instead of low risk (framing)**
- **Use inclusive terms**
- **Do not question the denier's motivation**
- **Communicate what has been achieved**
- **Avoid humour**
- **Underline scientific consensus**



Anchoring pro-vaccination, protecting the gains

1. Optimizing the opportunity health workers have to influence health-seeking behaviour
2. **Continue advocating for, and communicating on, immunization at caregiver, health workers and decision-maker levels.**
3. Use new tools to listen and tailor the response the pockets of susceptible populations.
4. Build resilient communities: educate the next generation of parents
5. **Build resilient programmes: safety communications capacity and resources**



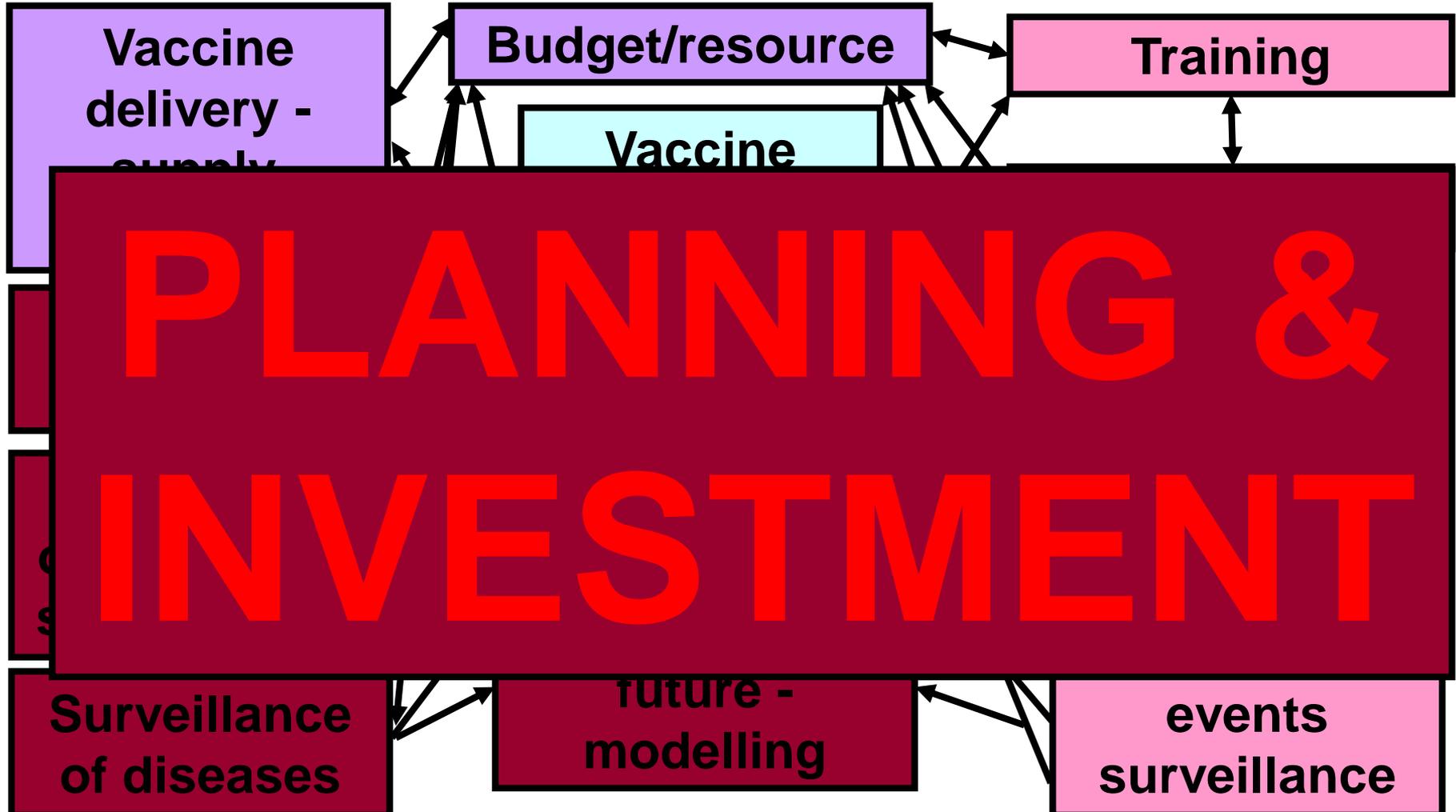
I feel that the greatest reward for doing is the
opportunity to do more.

(Jonas Salk)

izquotes.com



Components of vaccination programmes





About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

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www.gov.uk/phe

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