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

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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.

Donald J. Trump
@realDonaldTrump

Healthy young child goes to doctor, gets pumped with massive shot of many vaccines, doesn't feel good and changes - AUTISM. Many such cases!

5:35 AM - 28 Mar 2014

11,990 Retweets 9,674 Likes
Turmoil
Four kidnapped polio workers are found dead 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 guards were found in a ditch. The men were shot dead with their guns and cash was also taken.

Taliban militants oppose polio vaccination campaigns in Pakistan

Related Stories

Police said it was not clear whether the attack was linked to the current campaign to vaccinate children against the disease.

Being shot dead

Secretly filmed MPs deny wrongdoing

Birdman, Redmayne, Moore lead Oscars

HSBC reports sharp fall in profits

Egypt jails activist for five years

Cameron in pensioner benefits pledge

Features

Best pictures

Images of the ceremony and backstage at the Oscars night

Dangerous luxury

‘Why I regret my years as a sunset addict’

One time only

Could new “auto-disable” syringe help stem outbreaks of HIV?

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

1796 Development of first smallpox vaccine
1870 Louis Pasteur creates first live attenuated bacterial vaccine (chicken cholera)
1885 Pasteur creates the first live attenuated viral vaccine (rabies)
1896 Typhoid
1909 Calmette and Guerin create BCG, first live attenuated bacterial vaccine for humans
1920 Cholera
1942 Diphtheria
1950 BCG
1956 Inactivated polio
1957 Pertussis
1961 Tetanus
1962 Live oral polio
1968 Measles
1970 Mumps
1990 Hib conjugate
1999 Meningococcal C conjugate
1988 MMR
1996 DTaP/Hib
2000 Seasonal influenza over 65s
2001 Preschool added 3 acellular pertussis
2001 Pneumococcal conjugate PCV7
2002 Adolescent Td Combined tetanus and diphtheria
2003 PPV over 65s
2004 DTap/IPV/Hib DTap/IPV Td/IPV
2006 Pneumococcal conjugate PCV7
2006 Combined Hib/MenC
2008 Human papillomavirus (HPV)
2009 Pandemic Influenza
2010 Maternal Influenza
2010 Maternal Pertussis
2013 Children’s Influenza
2013 Rotavirus
2014 Influenza
2014 Meningococcal B
2015 Meningococcal ACWY
2015 Change to hexavalent DTap/IPV/Hib/HepB
2016 Shingles
2017 Coming soon
1997 9 antigens

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.

<table>
<thead>
<tr>
<th>When</th>
<th>Diseases protected against</th>
<th>Vaccine given</th>
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</thead>
<tbody>
<tr>
<td>Eight weeks old</td>
<td>Diphtheria, tetanus, pertussis (whooping cough), polio and Haemophilus influenzae type b (Hib)</td>
<td>DTaP/IPV/Hib</td>
</tr>
<tr>
<td></td>
<td>Pneumococcal (13 serotypes)</td>
<td>PCV</td>
</tr>
</tbody>
</table>
|                 | Meningococcal group B (MenB)
|                 | Rotavirus, gastroenteritis                                                                | MenB          |
| Twelve weeks old| Diphtheria, tetanus, pertussis, polio and Hib                                             | DTaP/IPV/Hib  |
|                 | Rotavirus                                                                                 | PCV           |
| Sixteen weeks old| Diphtheria, tetanus, pertussis, polio and Hib                                             | DTaP/IPV/Hib  |
|                 | Meningococcus PCV                                                                        | MenB          |
| One year old    | Hib and MMR                                                                               | Hib/MMR      |
|                 | Pneumococcal                                                                             | PCV           |
|                 | Measles, mumps and rubella (German measles)                                              | MMR           |
|                 | Meningococcus PCV                                                                        | MenB          |
| Two to seven years of age | (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 (check first dose given)                                      | MMR           |
| 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 | Diphtheria, tetanus and polio                                                              | Tdap         |
| School leavers 13 to 16 years | Meningococcal groups A, C, W and Y disease                                                                 | MenACWY      |

1 Only infants born on or after 1 May 2015 are eligible to receive this Men B vaccine. Please check with your GP.
2 Contacts perinatal advice.
The vaccination monster
Joseph Abel 1870s
Vaccinating the Baby,"

*Harper's Weekly*, February 19, 1870
United States Lottery. No. 76m 687

CLASS the FIRST.

HIS TICKET entitles the Bearer to receive
such Prize as may be drawn against its Num-
ber, according to a Resolution of CONGRESS,
passed at Philadelphia, November 18, 1776.

A.

J. Reed
Trust
Trust in the UK

Evaporation of Trust in Past Year in the UK

Percent trust in institutions, 2012-2017

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<tbody>
<tr>
<td>Trust Index:</td>
<td>35</td>
<td>43</td>
<td>42</td>
<td>39</td>
<td>42</td>
<td>40</td>
<td>29</td>
</tr>
</tbody>
</table>

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)
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.

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.

MMR The facts

Welcome to MMR The facts

This website has been put together to answer any questions you might have about MMR. You can look through resources in the MMR library, ask our experts, and read up on the latest news stories related to MMR.

MMR Research

The overwhelming weight of evidence provided by a number of studies demonstrating this is good for children.

- Go to a list of the key studies looked at
- Go to a detailed list in the research library

MMR basics

Answers to the questions parents often ask about giving 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
“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.
If you can't explain it simply, you don't understand it well enough.

- Albert Einstein
Risk: Framing

Burger contains 25% fat

OR

Burger is 75% fat-free

Vaccination 0.1% Side effects

OR

Vaccination 99.9% safe

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)
Components of vaccination programmes

Vaccine delivery - supply

Budget/resource

Training

Surveillance of diseases

Vaccine

Surveillance of population susceptibility

Vaccine development - JCVI/policy development

Monitoring attitudes to vaccination

Components of vaccination programmes

Communication

Training

Surveillance of coverage

Budget/resource

PLANNING & INVESTMENT

forecasting

future-modelling

events surveillance
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.