Joint Committee on Vaccination and Immunisation

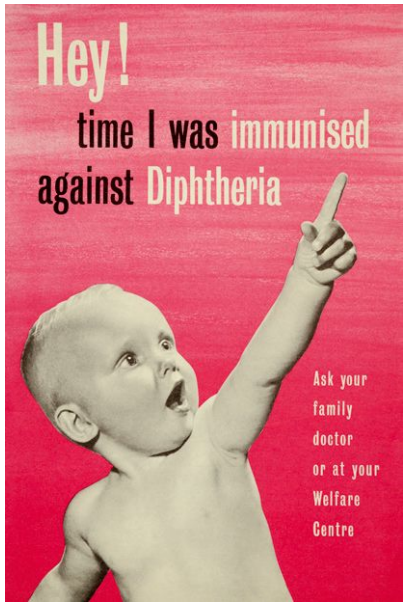
United Kingdom

GOV.UK

JCVI Joint Committee on Vaccination and Immunisation

Public Health England

UK Immunisation in the first half of the 20th century

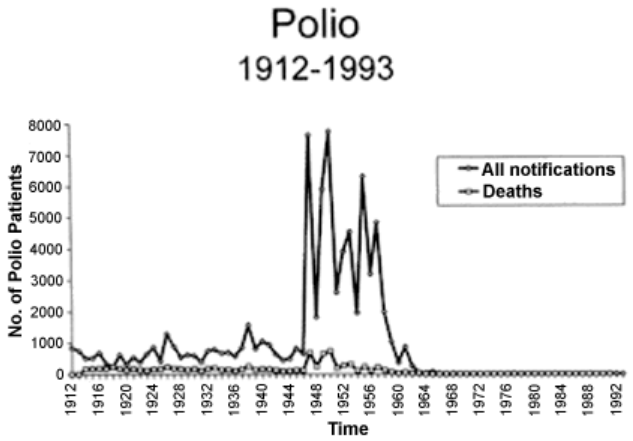


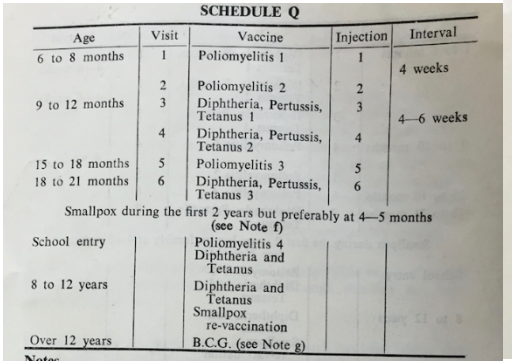
- From the 1930s to 1950s the delivery and design of non-smallpox immunisation programmes was **locally led**.
- Permission for Local Health Authorities (LHA) to run immunisation schemes had to be obtained from the Ministry of Health under the Public Health Act 1936, section 177 (1) /204 and from 1948 under section 26 of the NHS Act 1946.
- In January 1940, the Ministry of Health recommended that all LHAs applied to run diphtheria immunisation programmes to eliminate diphtheria and secondly to prevent a resurgence of disease due to war conditions at the time.

Uncoordinated services failed to control disease and led to inequity

Polio epidemic and the origins of the NITAG

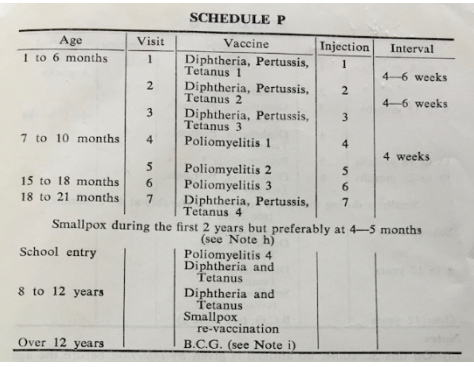
- **1955 Joint Committee on Poliomyelitis Vaccine constituted to advise on the use of polio vaccine for mass immunisation and respond to specific Ministerial questions (CHSC ref). The committee included members of both health councils and other external experts under the chairmanship of Lord Cohen.**
- Symposium on immunisation in childhood was held in London 4-6th May 1959 . Two alternate schedules P & Q considered by the Ministry of Health and approved by the Joint Committee on Poliomyelitis Vaccine
- In 1963, the Joint Committee for Polio Vaccination was replaced with the Joint Committee on Vaccination and Immunisation (JCVI) with a wider remit than just polio vaccination.
- JCVI became a statutory body in 1977
- JCVI currently exists as an Independent Departmental Expert Committee that advises the UK health departments on immunisation for prevention of infectious disease





SCHEDULE Q

Age	Visit	Vaccine	Injection	Interval
6 to 8 months	1	Poliomyelitis 1	1	4 weeks
	2	Poliomyelitis 2	2	
9 to 12 months	3	Diphtheria, Pertussis, Tetanus 1	3	4—6 weeks
	4	Diphtheria, Pertussis, Tetanus 2	4	
15 to 18 months	5	Poliomyelitis 3	5	
18 to 21 months	6	Diphtheria, Pertussis, Tetanus 3	6	
Smallpox during the first 2 years but preferably at 4—5 months (see Note f)				
School entry		Poliomyelitis 4 Diphtheria and Tetanus		
8 to 12 years		Diphtheria and Tetanus Smallpox re-vaccination		
Over 12 years		B.C.G. (see Note g)		



SCHEDULE P

Age	Visit	Vaccine	Injection	Interval
1 to 6 months	1	Diphtheria, Pertussis, Tetanus 1	1	4—6 weeks
	2	Diphtheria, Pertussis, Tetanus 2	2	4—6 weeks
	3	Diphtheria, Pertussis, Tetanus 3	3	
7 to 10 months	4	Poliomyelitis 1	4	4 weeks
	5	Poliomyelitis 2	5	
15 to 18 months	6	Poliomyelitis 3	6	
18 to 21 months	7	Diphtheria, Pertussis, Tetanus 4	7	
Smallpox during the first 2 years but preferably at 4—5 months (see Note h)				
School entry		Poliomyelitis 4 Diphtheria and Tetanus		
8 to 12 years		Diphtheria and Tetanus Smallpox re-vaccination		
Over 12 years		B.C.G. (see Note i)		

Thanks to Sarah Lang for supplying historical data

Prevention of epidemic polio led to a programme that is now the cornerstone of public health

Membership

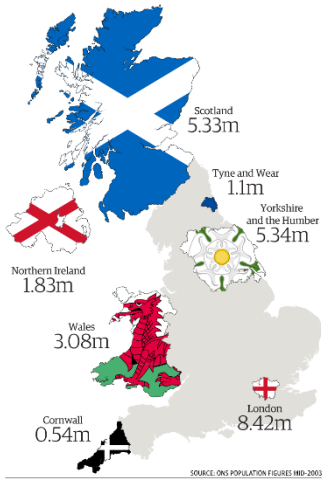
Secretariat hosted by Public Health England
Open adverts and interviews

- infectious diseases
- epidemiology
- virology
- bacteriology
- immunology
- vaccinology
- neurology
- public health
- mathematical modelling
- health economics
- general practice
- nursing
- paediatrics
- management of immunisation programmes
- Lay members

Observers from UK Public Health agencies, UK Governments, military

JCVI Terms of Reference

devolved



*"To **advise UK health departments** on immunisations for the prevention of infections and/or disease following due consideration of the **evidence on the burden of disease, on vaccine safety and efficacy and on the impact and cost effectiveness of immunisation strategies**. To consider and identify factors for the successful and effective implementation of immunisation strategies. To identify important knowledge gaps relating to immunisations or immunisation programmes where further research and/or surveillance should be considered."*

Clearly stated terms of reference

New vaccines
Programme monitoring

JCVI process:

- The process involves appraisal of the available evidence:
  - published literature
  - unpublished data
  - advice from international bodies including WHO
  - correspondence with key experts;
  - **commissioned** clinical research
  - **commissioned** epidemiological analyses
  - **commissioned** operational analyses
  - **commissioned** attitudinal research
  - **commissioned** bespoke mathematical modelling studies of the impact and cost effectiveness of immunisations strategies;
  - horizon scanning of vaccine developments
  - calls for evidence from interested parties

Strong & systematic evidence synthesis

Expert secretariat

NHS constitution

Since 1 April 2009 the Health Protection (Vaccination) Regulations 2009 place a duty on the Secretary of State for Health in England to ensure, so far as is reasonably practicable, that the recommendations of JCVI are implemented, where those recommendations:

a) relate to new provision for vaccination under a national vaccination programme or to changes to existing provision under such a programme and

b) are made by JCVI (and not therefore a Sub-committee of JCVI) and

c) are in response to a question referred to the JCVI by the Secretary of State and

d) are based on an assessment which demonstrates cost-effectiveness and

e) do not relate to vaccination in respect of travel or occupational health.

This duty ceases to apply in relation to a recommendation where JCVI withdraws that recommendation.

Recommendations are binding if certain criteria are met, but advice can also be provided in other circumstances

51 years ago
Vaccines in the UK programme 1966

Vaccine/Age	Visit 1 1-6 months	Visit 2 1-6 months	Visit 3 1-6 months	Visit 4 7-10 months	Visit 5 7-10 months	Visit 6 15-18 months	Visit 4 18-21 months	School entry	8-12 years
Diphtheria, Tetanus, Pertussis	DTwP 1	DTwP 2	DTwP 3				DTwP 4	DT	DT
Polio				Polio 1	Polio 2	Polio 3		Polio 4	
Smallpox		Smallpox 1 at 4-5 months							Smallpox 2
BCG									BCG (>12 years)

21 years ago
Vaccines in the UK programme 1996

Vaccine/Age	2 months	3 months	4 months	12 m	13m	3-5 years	13-18 y
Diphtheria, Tetanus, Pertussis, Polio, Hib	DTwP-Hib + oral polio	DTwP-Hib + oral polio	DTwP-Hib + oral polio			DT + oral polio	dT + oral polio
Measles, Mumps, Rubella					MMR	MMR	

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UK Schedule in 2017

Vaccine/Age	Maternal	2 months	3 months	4 months	12 m	3-5 years	5-11 years	13-18 y
Diphtheria, Tetanus, Pertussis, Polio, Hib, HBV	DTaP	DTaP-IPV-Hib-HBV	DTaP-IPV-Hib-HBV	DTaP-IPV-Hib-HBV	Hib-MenC	dTaP-IPV		dT-IPV
Meningococcal C			MenC					MenACWY
Rotavirus		Rv	Rv					
Measles, Mumps, Rubella					MMR	MMR		
Pneumococcal		PCV13		PCV13	PCV13			
Cervical cancer (HPV)								HPVx2
Meningococcal B		MenB		MenB	MenB			
Influenza	TIV					LAIV (from 2 years)	LAIV	

Elderly

TIV

Pneumoccal

Shingles

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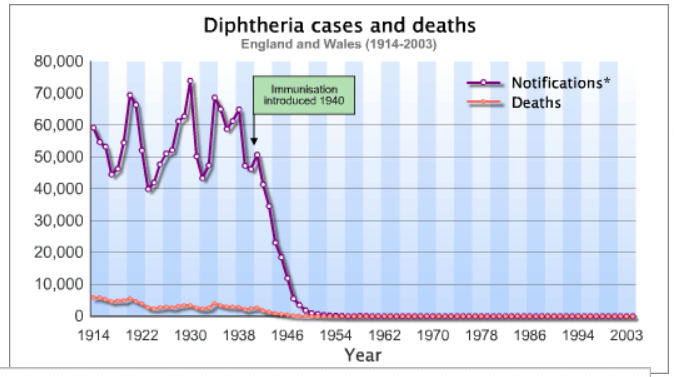


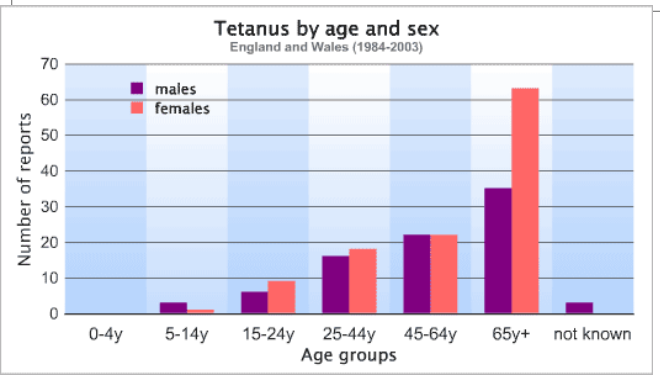
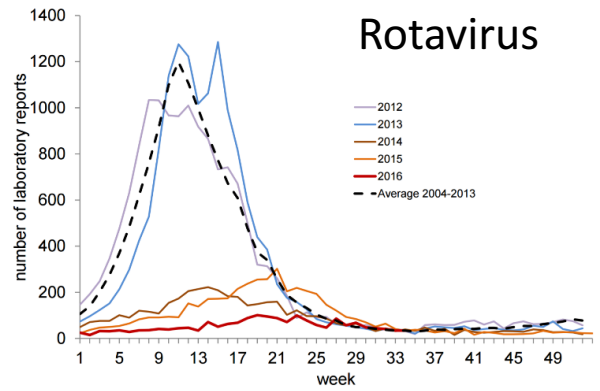


Figure 2. Weekly rotavirus laboratory reports compared to weekly mean reports (2004-2013), England and Wales



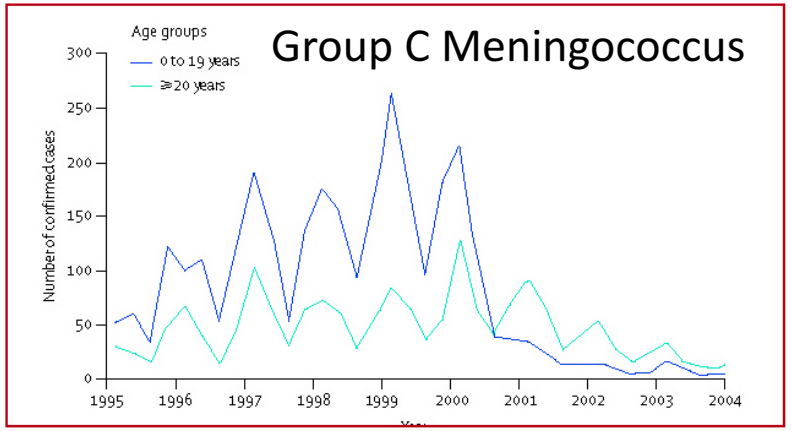
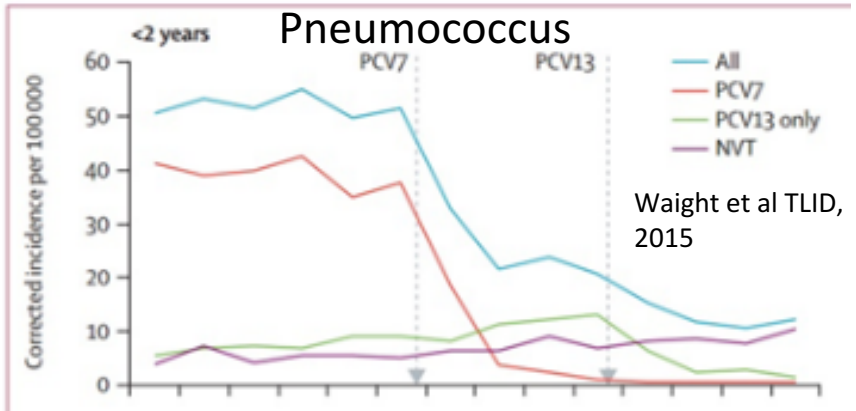
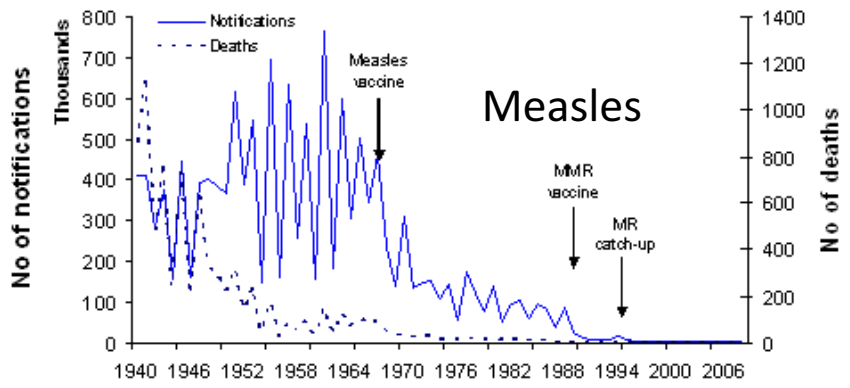


Figure: Cases of laboratory-confirmed meningococcal serogroup C disease by age group and quarter, 1995–2004



Waight et al TLID, 2015



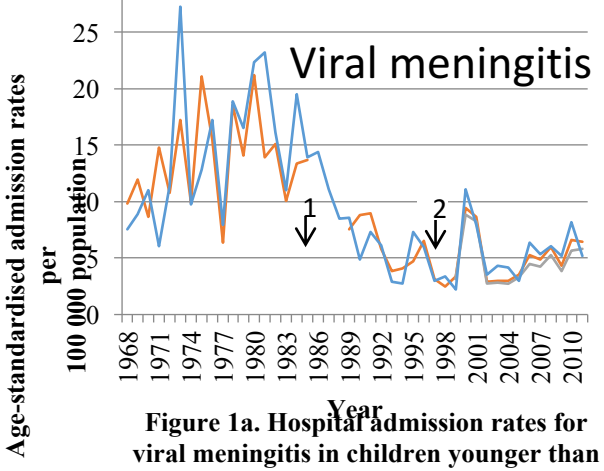
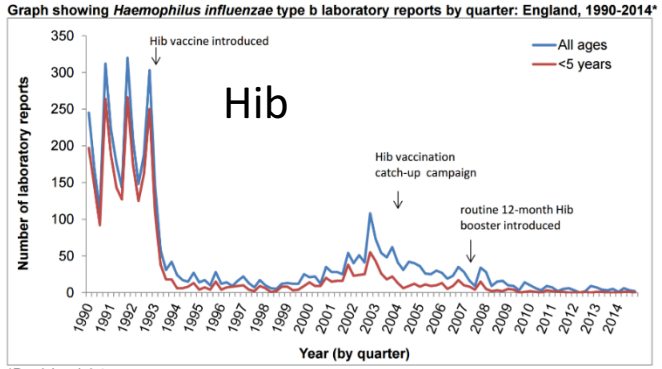
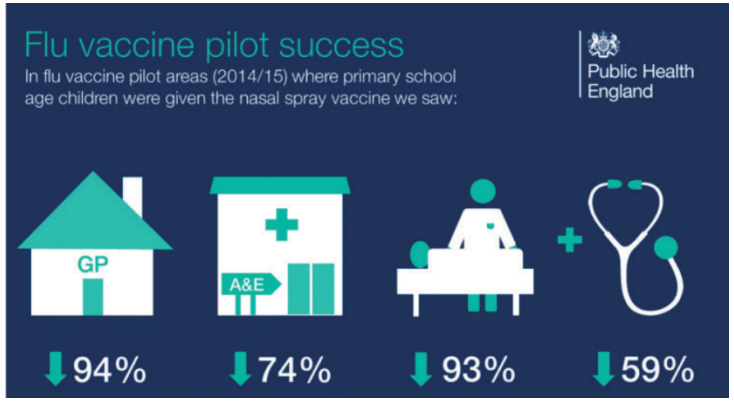


Figure 1a. Hospital admission rates for viral meningitis in children younger than 15 years



*Provisional data
Source: Routine laboratory data combined with reference laboratory data



Surveillance critical to inform vaccine introduction and demonstrate programme benefit

Public Health England

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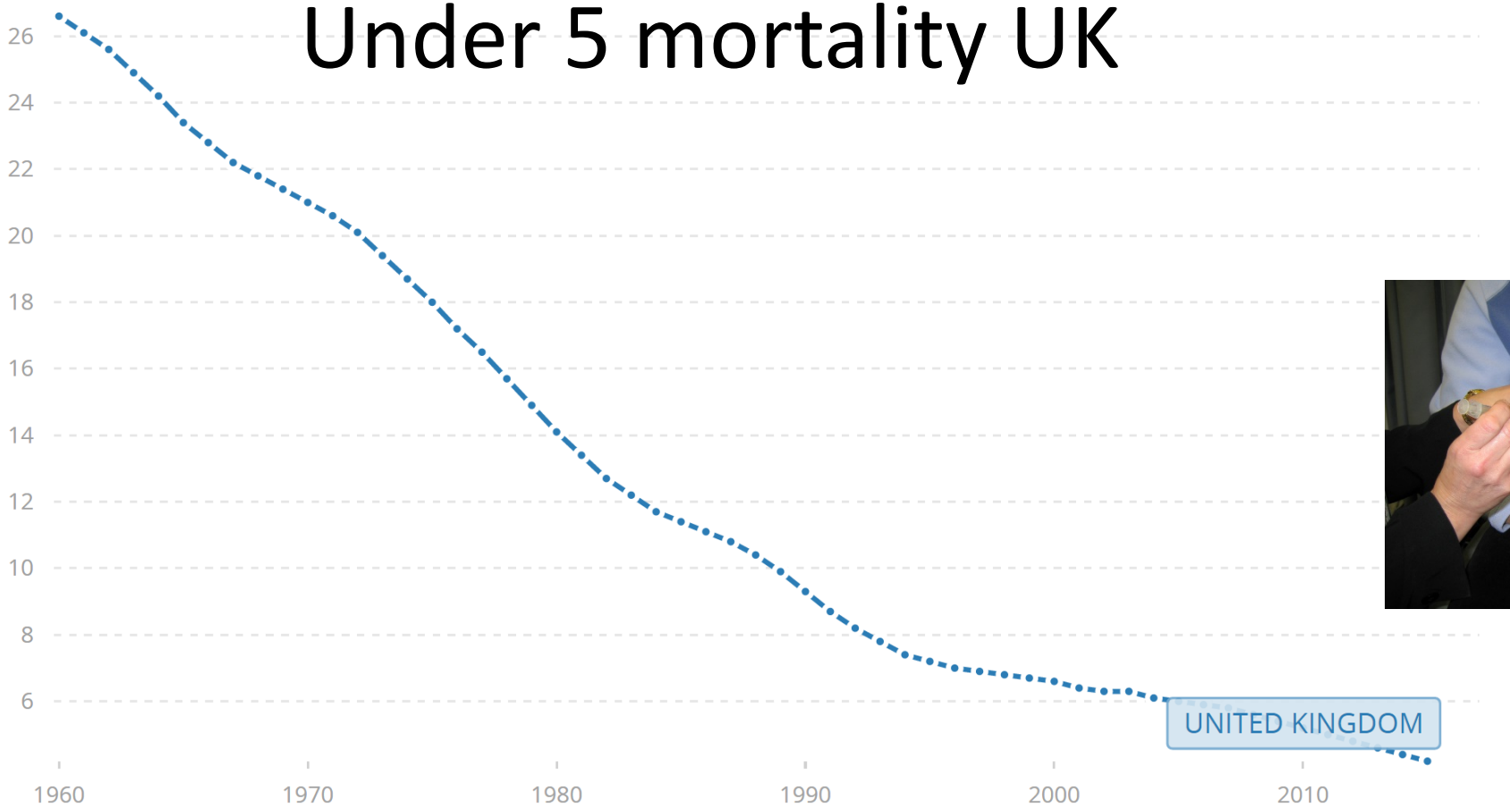
Under 5 mortality UK



World Bank

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Challenges for JCVI

- Strengths:
  - Comprehensive immunisation programme
  - Strong surveillance system
  - Forward looking and horizon scanning
  - Clear terms of reference
  - well organised secretariat
  - Manages the programme
- Challenges
  - Maintaining strong systems to monitor vaccine impact and changing epidemiology when finances are constrained
  - Capacity in the secretariat
  - Balance between cost-effectiveness analysis, public perception and health benefit
  - Public confidence in immunisation – important role of JCVI
  - Health economic drivers of decisions could reduce flexibility
  - Is there a need for a NITAG?


Parents still snub triple jab even as epidemic is predicted

Measles Vs MMR

My beautiful boy's life has been blighted

'Millions will see this as an attempt to frighten parents'


DAILY EXPRESS

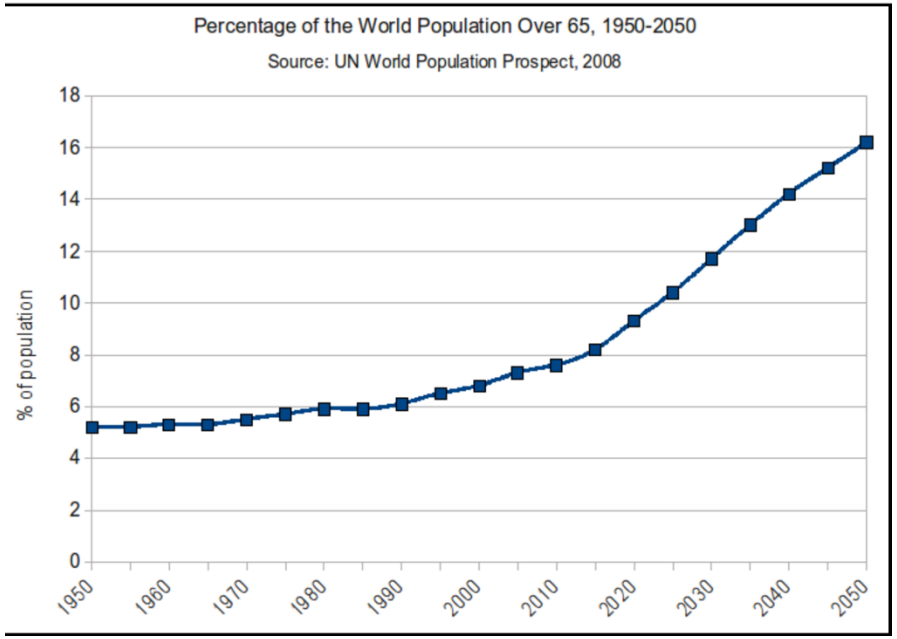
MONEY EXCLUSIVES

1. Taxes to go up AGAIN
2. Stamp duty up 300%

EXPRESS SPECIAL REPORTS PAGE 6

MEASLES

Future priorities



- Childhood
  - RSV
  - GBS
  - (? CMV, Group A Strep)

- Older adult…….
  - Improve current vaccines - influenza, shingles, pneumococcal PS
  - Respiratory infections including RSV
  - Gram negative infections

- Special Groups
  - High risk
  - Nosocomial infection
  - Outbreak Pathogens