Immunisation

Dr Irfan Ghani
Consultant in Public Health
Shropshire Public Health
“The two public health interventions that have had the greatest impact on the world’s health are clean water and vaccines.”

World Health Organization
Babies are offered essential vaccines to protect against conditions including diphtheria, tetanus, whooping cough and polio through to meningitis, measles, mumps and rubella. The childhood vaccination programme is saving lives and preventing serious illness and disability.

Adolescents and young adults receive vaccines which protect against cervical cancer (girls) along with meningitis and septicaemia. Young adults who missed out on MMR as a child are encouraged to get vaccinated to protect against measles, mumps and rubella.

Older people are urged to protect themselves from flu every year (from age 65). We also vaccinate against serious and potentially fatal pneumococcal infections in people of 65 and over. Over 70s can avoid painful and debilitating shingles with a vaccine.
**Timeline**

- **1942**: Diphtheria (Pre vaccine year 1941)
- **1957**: Pertussis (whooping cough) (Pre vaccine year 1956)
- **1968**: Measles (Pre vaccine year 1967)
- **1992**: Haemophilus influenzae type b (Pre vaccine year 1991)
- **1999**: Group C invasive meningococcal disease (Pre vaccine year 1998/99)
- **2006**: Invasive Pneumococcal disease caused by 13 vaccine serotypes (Pre vaccine year 2005/06)

**Disease**

- Diphtheria
- Pertussis (whooping cough)
- Measles
- Haemophilus influenzae type b
- Group C invasive meningococcal disease
- Invasive Pneumococcal disease caused by 13 vaccine serotypes

**Cases**

- **1942**: Diphtheria - 50,804*
- **1957**: Pertussis (whooping cough) - 92,407*
- **1968**: Measles - 460,407*
- **1992**: Haemophilus influenzae type b - 862**
- **1999**: Group C invasive meningococcal disease - 883**
- **2006**: Invasive Pneumococcal disease caused by 13 vaccine serotypes - 3552**

**2014 total laboratory confirmed cases**

- **1942**: Diphtheria - 1
- **1957**: Pertussis (whooping cough) - 3506
- **1968**: Measles - 130
- **1992**: Haemophilus influenzae type b - 12
- **1999**: Group C invasive meningococcal disease - 28
- **2006**: Invasive Pneumococcal disease caused by 13 vaccine serotypes - 858

**% Reduction**

- **1942**: Diphtheria - 99.9%
- **1957**: Pertussis (whooping cough) - 96%
- **1968**: Measles - 99.9%
- **1992**: Haemophilus influenzae type b - 99%
- **1999**: Group C invasive meningococcal disease - 97%
- **2006**: Invasive Pneumococcal disease caused by 13 vaccine serotypes - 76%

**Geography**

- England and Wales
- England

* notifiable cases of disease
** confirmed cases of disease
^ 2014/15
^^ 2013/14
Immunisation

Key messages

- Benefits to individuals and society
  - Best way to protect against diseases
  - Herd Immunity

- Vaccines are effective

- Vaccines are safe

- Never too late to get vaccination
Immunisation
Key Issues

- Myths
- At Risk Groups
- Variation in Uptake across the County
- Mistrust in Immunisation Institutions
Immunisation

Key resources

- NHS Choices
- Public Health England
  - Immunisation schedules
  - Posters / leaflets for various vaccinations