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On the cover

This illustration depicts the influenza virus.
Graphic created by Dan J. Higgins, Division of Communication Services, CDC

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The editors would like to thank Dr. William L. Atkinson, who summarized, standardized and compiled CDC’s vaccine-preventable disease and vaccine teaching materials to create the Pink Book.

“He just thought it up and did it.” – Apocalypse Now

Milestones in the History of Vaccination

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>400 BCE</td>
<td>Hippocrates describes diphtheria, epidemic jaundice, and other conditions</td>
</tr>
<tr>
<td>1100s</td>
<td>Variolation for smallpox first reported in China</td>
</tr>
<tr>
<td>1721</td>
<td>Variolation introduced into Great Britain</td>
</tr>
<tr>
<td>1796</td>
<td>Edward Jenner inoculates James Phipps with cowpox, and calls the procedure vaccination (“vacca” is Latin for cow)</td>
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Milestones in the History of Vaccination

1870 Louis Pasteur creates the first live attenuated bacterial vaccine (chicken cholera)
1884-85 Pasteur creates the first live attenuated viral vaccine for use in humans
1900 Paul Ehrlich formulates receptor theory of immunity
1901 First Nobel Prize in Medicine to von Behring for diphtheria antitoxin
1909 Theobald Smith discovers a method for inactivating diphtheria toxin
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</tr>
</thead>
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<tr>
<td>1919</td>
<td>Calmette and Guerin create BCG, the first live attenuated bacterial vaccine for humans</td>
</tr>
<tr>
<td>1923</td>
<td>First whole-cell pertussis vaccine tested by Gaston Ramon develops diphtheria toxoid</td>
</tr>
<tr>
<td>1926</td>
<td>Ramon and Christian Zoeller develop tetanus toxoid</td>
</tr>
<tr>
<td>1931</td>
<td>Goodpasture describes a technique for viral culture in hens’ eggs</td>
</tr>
<tr>
<td>1936</td>
<td>Thomas Francis and Thomas Magill develop the first inactivated influenza vaccine</td>
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Milestones in the History of Vaccination

1948
John Enders and colleagues isolate Lansing Type II poliovirus in human cell line

1954
Enders and Peebles isolate measles virus
Francis Field Trial of inactivated polio vaccine

1955
Inactivated polio vaccine licensed

1961
Human diploid cell line developed

1963
Measles vaccine licensed
Trivalent oral polio vaccine licensed
Milestones in the History of Vaccination

1965
Bifurcated needle for smallpox vaccine licensed

1966
World Health Assembly calls for global smallpox eradication

1967
Maurice Hilleman develops Jeryl Lynn strain of mumps virus

1969
Stanley Plotkin develops RA 27/3 strain of rubella vaccine virus

1971
MMR vaccine licensed
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Milestones in the History of Vaccination

1977
Last indigenous case of smallpox (Somalia)

1979
Last wild poliovirus transmission in the U.S.

1981
First hepatitis B vaccine licensed

1983
Smallpox vaccine withdrawn from civilian market

1986
First recombinant vaccine licensed (hepatitis B)
National Childhood Vaccine Injury Act
Milestones in the History of Vaccination

1989
Two-dose measles vaccine recommendation

1990
First polysaccharide conjugate vaccine licensed (Haemophilus influenzae type b)

1994
Polio elimination certified in the Americas

1995
Varicella vaccine licensed

1996
Acellular pertussis vaccine licensed for infants
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Milestones in the History of Vaccination

1997
Sequential polio vaccination recommended

1998
First rotavirus vaccine licensed

1999
Exclusive use of inactivated polio vaccine recommended
Rotavirus vaccine withdrawn

2000
Pneumococcal conjugate vaccine licensed for infants

2003
Live attenuated influenza vaccine licensed
2004
Inactivated influenza vaccine recommended for all children 6–23 months of age

2004
Indigenous transmission of rubella virus interrupted

2005
Acellular pertussis vaccines licensed for adolescents and adults

2005
MMR-varicella (MMRV) licensed

2006
Second generation rotavirus vaccine licensed
disease definition: 1. (an) illness of people, animals, plants, etc., caused by infection or a failure of health ratherâ€œ. Learn more.Â

Meaning of disease in English. disease. noun. uk. Your browser doesn't support HTML5 audio. /dɪˈziːz/ us. Your browser doesn't support HTML5 audio. Disea Electronics Co. Ltd. 1 like. Disea specialized in 0.9''-15''inch TFT LCD & Touch Screen & driver board since 2011, got ISO9001:2008 and...Â See more of Disea Electronics Co. Ltd on Facebook. Log In. or. Create New Account. See more of Disea Electronics Co. Ltd on Facebook. Log In. Forgotten account? ABOUT DISEA. DISEA devotes itself to the research, development and manufacturing of various of industrial TFT-LCD, with capacitive touch panels, and with AD boards. MORE LCD display custom solutions. Does your product have special application requirements, electrical specifications, optical specifications, touch features, or mechanical dimensions that require customized displays? DISEA can meet your custom LCD requirements. Total solution for CTP&LCD display. From Middle English disese, from Anglo-Norman desese, disaise, from Old French desaise, from des- + aise. Equivalent to dis- + â€œease. Displaced native Middle English ade, audle (āœœdiseaseā€œ) (from Old English āœœdisease (sicknessā€œ), see adle), Middle English cothe, coathe (āœœdiseaseā€œ) (from Old English coÃµ (āœœdiseaseā€œ), see coath), enPR: dÃzÉ‘ IPA(key): /dɪˈziːz/. Rhymes: -iiz. disease (countable and uncountable, plural diseases). Human disease redirects here. For the Slayer song, see Soundtrack to the Apocalypse. Flare up redirects here. For the Transformers character, see Flareup (Transformers). Medical condition redirects here. For the descriptive terminology usingâ€œ.