Figure 3: Current status of disease prevention through vaccine development and immunization
Part A: Vaccines licensed in the United States

Vaccine[1] (disease)	Status of Vaccine Development					Status of Licensure		Status of Immunization										
	Vaccine Research and Development		Safety and Efficacy Testing			Licensure			Estimated Coverage of Target Population When Recommended (%)									
	Basic R&D	Animal Models	Phase I	Phase II	Phase III	Application Made	License Granted	Target Population	0-20		20-40		40-60		60-80		80-100		Eradication[2]
Smallpox																			
Adenovirus								Military											
Anthrax								Risk groups[3]	4										
BCG (tuberculosis)[5]								Risk groups	4										
Cholera								Risk groups	4										
Diphtheria								Children											
Hemophilus influenzae type b (meningitis)								Children											
Hepatitis B virus								Children											
								Risk groups											
Influenza virus								Risk groups											
Japanese encephalitis virus								Risk groups	4										
Measles virus								Children											
Meningococcal groups A, C, Y, W135 (meningitis)								Epidemic control	4										
Mumps virus								Children											
Pertussis (whooping cough)								Children											
Plague								Epidemic control	4										
Pneumococcal (pneumonia)								Risk groups											
Poliomyelitis virus (polio)								Children											
Rabies virus								Risk groups	4										
Rubella virus (German measles)								Children											
Tetanus								Children											
								Adults											
Typhoid								Risk groups	4										
Yellow fever virus								Risk groups	4										

[1]Research to develop improved versions is being conducted for many of these vaccines.

[2]Eradication is practicable only for those diseases for which there are no reservoirs for the causative agent.

[3]Risk groups vary by vaccine depending on people's likely exposure to causative agents, on their occupations, or on their traveling in certain areas.

[4]Data are not available; coverage is estimated where shaded.

[5]BCG = *Bacille Calmette-Guerin.*