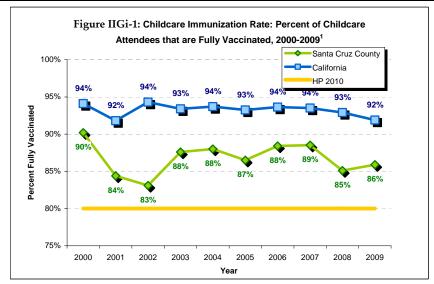
# G. IMMUNIZATIONS

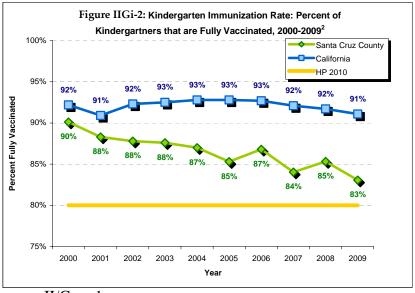
Importance	Disease prevention is the key to public health. It is always better to prevent a disease than to have to treat it. Vaccines prevent disease both directly, in the people who receive them, and indirectly, by reducing the number of infected people who could otherwise transmit infection. Vaccines are responsible for the control of many infectious diseases that were once common in this country (including polio, measles, diphtheria, pertussis/whooping cough, rubella/German measles, mumps, tetanus, and Haemophilus influenzae type b (Hib).	
Definitions	Fully Immunized / All Required Vaccines: In order to be fully vaccinated, a child must receive 4+ doses of DTP (diphtheria, tetanus and pertussis), 3+ Polio, 1+ MMR (measles, mumps and rubella-2+ doses of MMR for kindergarten), 1+ Hib ( <i>Haemophilis influenza</i> type B, not required for kindergarten), 3+ Hepatitis B, and 1+ varicella (or physician-documented varicella disease)	
	Personal Belief Exemption (PBE): a form that parents can choose to sign upon registering their child in daycare or kindergarten. This exempts the child from the required immunizations for school entry, with the caveat that should an outbreak of a vaccine-preventable disease occur, the child may be excluded from the classroom until the outbreak resolves or the child is protected by becoming either vaccinated or prophylaxed, or by acquiring natural immunity.	
Healthy People 2010 Objective	<ul> <li>Increase proportion of young children who receive all vaccines that have been recommended for universal administration (for at least 5 years) to 80%</li> </ul>	

### i. VACCINE COVERAGE

In 2009, 92% of childcare attendees statewide and 86% of attendees in Santa Cruz County were fully immunized. In Santa Cruz County, that left 645 attendees not completely vaccinated, of whom 221 attendees were not fully vaccinated because of a personal belief exemption (PBE). During the same year, 91% of kindergartners statewide had received all required immunizations, compared to 83% of kindergartners in Santa Cruz County.<sup>2</sup> That left 571 Santa Cruz students incompletely vaccinated, of whom 219 were exempt under a personal belief exemption (PBE).

Parents considering non-medical exemptions for their children should be aware of the potential risk for disease both for their children and the public.





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#### ii. VACCINE-PREVENTABLE DISEASES

Vaccine-preventable diseases have many social and economic costs: for example, sick children miss school and can cause parents to lose time from work. These diseases also result in doctor visits, hospitalization, and even premature death. There were 177 vaccine-preventable illnesses among county residents between 2005 and 2009, many occurring in school-aged clusters causing loss of classroom time.

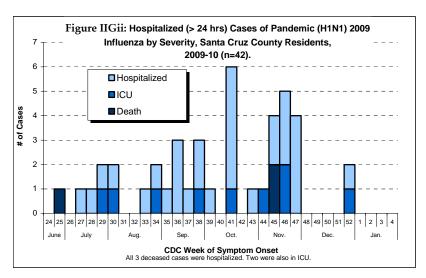
Table IIGii: Vaccine-Preventable Disease (VPD), Santa Cruz County, 2005-2009		
VPD	Count	
Viral Hepatitis A	11	
Hepatitis B, Acute	11	
Measles (Rubeola)	0	
Mumps	8	
Pertussis (Whooping cough)	147	
TOTAL	177	

Disease prevention is the key to public health. It is always better to prevent a disease than to have to treat it. Vaccines prevent

disease both directly, in the people who receive them, and indirectly, by reducing the number of infected people who could otherwise transmit infection. Vaccines help prevent infectious diseases and save lives. Vaccines are responsible for the control of many infectious diseases that were once common in this country (including polio, measles, diphtheria, pertussis/whooping cough, rubella/German measles, mumps, tetanus, and Haemophilus influenzae type b (Hib).

## PANDEMIC (H1N1) 2009 FLU

In April 2009, the world was introduced to a new strain of influenza, which the World Health Organization later determined to be a pandemic strain. By the end of the year, 42 Santa Cruz County residents had been hospitalized with lab-confirmed pandemic (H1N1) 2009 flu virus. Of them, 11 were admitted to an Intensive Care Unit and 3 residents died due to this pandemic strain. A tremendous increase in influenza-associated pediatric deaths could be viewed as the most devastating impact the pandemic had on our nation, with nearly 2.5 times as many pediatric



deaths as in a normal flu season. Fortunately, a vaccine became available towards the end of 2009, and a public/private partnership was established with a community vaccinator to administer vaccinations on a mass scale to the public through the Public Health Department. The number of flu cases has now decreased dramatically. It is noteworthy that the number of laboratory-confirmed cases far underestimates the true number of cases, because most people do not get tested for influenza unless they become severely ill.

## Helpful Websites

- World Health Organization (WHO): <a href="http://www.who.int/topics/immunization/en/">http://www.who.int/topics/immunization/en/</a>
- Centers for Disease Control and Prevention (CDC): <a href="http://www.cdc.gov/vaccines/">http://www.cdc.gov/vaccines/</a>
- California Department of Public Health (CDPH):
   <a href="http://www.cdph.ca.gov/programs/immunize/Pages/Default.aspx">http://www.cdph.ca.gov/programs/immunize/Pages/Default.aspx</a>
- County of Santa Cruz: <a href="http://www.santacruzhealth.org/phealth/cd/3immunize.htm">http://www.santacruzhealth.org/phealth/cd/3immunize.htm</a>

### Sources

- California Department of Public Health. Childcare Assessment Results California, 2009. http://www.cdph.ca.gov/programs/immunize/Documents/2009ChildCareAssessmentReport.pdf
- California Department of Public Health. Kindergarten Assessment Results California, 2009. http://www.cdph.ca.gov/programs/immunize/Documents/2009KindergartenAssessmentReport.pdf