At the beginning of the 20th Century, communicable diseases (diseases spread from one person to another) were widespread throughout the U.S., causing a significant burden to the population. Throughout the 1900s substantial achievements made vaccines overwhelmingly safe and effective at preventing the spread of disease.

As a result, vaccines have saved millions of lives over the last 100 years. Childhood vaccination has proven to be one of the most effective public health strategies to control and prevent disease. However, today’s healthcare workers still encounter patients who decline or delay vaccinations.

Often cited reasons for this opposition include: religious or philosophic objections; interference with personal choice; questions regarding the safety or efficacy of vaccines; and, the belief that vaccine preventable diseases do not pose a serious health risk. Data and science prove otherwise.

The Clinton County Health Department (CCHD) adheres to and promotes the Centers for Disease Control and Prevention’s (CDC) Advisory Committee on Immunization Practice’s (ACIP) regulations and immunization schedules. These regulations and schedule recommendations are adapted annually as a result of scientific breakthroughs and disease outbreaks.

### Vaccines & Public Health

<table>
<thead>
<tr>
<th>Vaccine Preventable Communicable Diseases in the United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disease</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>Pertussis</td>
</tr>
<tr>
<td>Hib</td>
</tr>
<tr>
<td>(Haemophilus influenza type b)</td>
</tr>
<tr>
<td>Measles</td>
</tr>
<tr>
<td>Diphtheria</td>
</tr>
<tr>
<td>Polio</td>
</tr>
<tr>
<td>Smallpox</td>
</tr>
</tbody>
</table>

Source: CDC MMWR January 6, 2017

When most members of the community are immunized against a contagious disease, such as measles, mumps or influenza, there is little opportunity for an outbreak. Those who are not eligible for certain vaccines—such as infants, pregnant women or immunocompromised individuals—gain some protection because the spread of contagious disease is contained. This is known as community or “herd” immunity. When individuals eligible to receive a vaccination against a contagious disease decline to do so, the community is at greater risk for an outbreak.

Follow the “Herd”

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**Childhood Immunizations**

Combined 7-Vaccine Series

Childhood vaccines are among the most cost-effective and significant core components of preventive healthcare. Certain diseases can be especially dangerous for infants and young children. To help protect against these diseases, standard recommendations for a series of vaccines have developed. The combined 7-vaccine series* protects children from eleven communicable diseases and is fundamental to public health. By following vaccination schedules parents help keep their families and community healthy. In Clinton County, childhood immunization rates fall short of meeting the 2018 NYS Prevention Agenda Objective, but exceed state and national averages.

| Percentage of Children Aged 19-35 Months with Combined 7-Vaccine Series*, 2015 |
|---------------------------------|------------------|
| Clinton County                  | 74.2%            |
| New York State (excluding NYC)  | 62.0%            |
| United States                   | 72.2%            |

Source: NYS Prevention Agenda & CDC National Center for Health Statistics

*The combined 7-vaccine series includes:
- DTaP (diphtheria, tetanus toxoids, and acellular pertussis vaccine);
- Polio (poliovirus vaccine);
- MMR (measles, mumps and rubella vaccine);
- Hib (Haemophilus influenza type b vaccine);
- Hep B (hepatitis B vaccine);
- Varicella vaccine;
- PCV (pneumococcal conjugate vaccine).

This series is also referred to by the number of doses of each vaccine in the series, or 4:3:1:3:3:1:4.

**Clintons County K-12 Student Immunization Rates, 2015-2016**

- 98% of students are FULLY IMMUNIZED
- 0.19% of students have RELIGIOUS WAIVERS for vaccination
- 0.18% of students have MEDICAL WAIVERS for vaccination

Source: NYS 2015-2016 School Immunization Survey—Type 3 and 1 Districts and Public Schools
Meningococcal infections don’t happen very often, but can be very dangerous when they do. Teens and young adults are at increased risk for meningococcal disease, including meningitis (an infection of the lining of the brain and spinal cord) and sepsis (blood infections). The disease strikes healthy young people without warning and can become very serious, very quickly.

As of September 2016, all students entering 7th, 8th, and 12th grades in NYS must be fully vaccinated against meningococcal disease in order to attend school. Clinton County averages less than one case per year, demonstrating the effectiveness of vaccination.

Pneumococcal infections can range from ear and sinus infections to pneumonia and bloodstream infections. Children younger than 2 years old and adults 65 years or older are among those most at risk for disease. Vaccines available to protect against pneumococcal disease include pneumococcal conjugate vaccine (PCV13) and pneumococcal polysaccharide vaccine (PPSV23). Both Clinton County and NYS remain below the Healthy People 2020 target of 90% of adults aged 65+ years having ever received a pneumococcal vaccination.

The HPV vaccine has had lower acceptance than other adolescent vaccines. Theories for this low acceptance include clinicians reluctance to recommend the HPV vaccine at the recommended age, parents concerns of sexual behavior, and religious and social influences. Significant media efforts on the state and national levels have targeted increased acceptance of the HPV vaccine. Immunization rates have steadily increased since 2006.

Percentage of females aged 13-17 years with 3 or more doses of HPV immunization

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2012</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinton County</td>
<td>28.6%</td>
<td>33.8%</td>
<td>39.7%</td>
</tr>
<tr>
<td>New York State</td>
<td>34%</td>
<td>44.3%</td>
<td>47.3%</td>
</tr>
</tbody>
</table>

Source: NYS Prevention Agenda 2018 Objective

Looking for more information? Visit [www.cdc.gov/vaccines](http://www.cdc.gov/vaccines) or call CCHD at 518-565-4848.
MOBILIZING ACTION

RECOMMENDATIONS FOR RESIDENTS, HEALTH PROFESSIONALS AND COMMUNITY LEADERS

Residents
- Talk to your healthcare provider about your vaccination history and needs.
- Receive vaccinations recommended by your healthcare provider.
- Stay up-to-date on vaccine recommendations.
- Keep track of your and your family’s vaccination history.
- Contact your healthcare provider or local health department for more information.

Healthcare Professionals
- Assess immunization status at every clinical encounter.
- Strongly recommend needed vaccines.
- Administer needed vaccines.
- Have an established referral system for vaccines not provided by your practice.
- Utilize NYSIIS to help maintain accurate and up-to-date patient immunization records.
- Have practice-level immunization policies for patients and staff.
- Educate on the importance and safety of vaccines.

Community Leaders
- Be familiar with the science of and research on vaccines and vaccine safety.
- Support vaccination programs and policies within the community.
- Advocate for resources that increase access to vaccines, especially for high-risk populations.
- Publicly champion vaccination for the common good.

Clinton County Health Department • Phone 518-565-4840 • Fax 518-565-4717 • www.ClintonHealth.org

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