Columbia/Boone County Department of Public Health and Human Services

School-Based Flu Vaccination Program Report

2016-2017
Introduction

Seasonal Influenza, commonly known as “the flu”, is caused by influenza viruses, which infect the respiratory tract. In the United States, 5% to 20% of the population becomes ill with the flu and more than 200,000 people are hospitalized from seasonal influenza-related complications each year (Seasonal Influenza Q&A, 2015). Populations at the highest risk for serious flu complications include children under 5, pregnant women, and adults over 65. Individuals with certain health conditions including asthma, diabetes, lung disease, heart disease, and those with weakened immune systems due to HIV and cancer are also at high risk (“People at High Risk of Developing Flu-Related Complications”, 2015). Flu seasons are unpredictable and can be severe. The number of flu-associated deaths from 1976 to 2007 ranged from a low of 3,000 to a high of 49,000 people annually (“Estimating Seasonal Influenza-Associated Deaths in the United States: CDC Study Confirms Variability of Flu”, 2015). Influenza illness can be costly, not just in direct medical costs, but also in lost time from work and/or school. The best way to prevent seasonal flu is by getting vaccinated each year (“CDC Says ‘Take 3’ Actions To Fight The Flu”, 2015).

One way to protect the community at large, including those at high risk for flu complications, is to vaccinate school-aged children. The Advisory Committee on Immunization Practices (ACIP) recommends that all children ages 6 months and older be vaccinated against influenza every year. School-aged children are the prime source of influenza transmission in a community, and although they are not at high risk of influenza complications, influenza illness rates are high in this age group (Halloran, 2006). School-aged children foster the transmission of infections due to their physical environment. Students are in close contact with one another, share supplies and equipment, and may not adhere to the good health habits that help prevent the spread of infectious diseases. The Community Preventive Services Task Force recommends school-located vaccination programs based on strong evidence of effectiveness in increasing vaccination rates, and in decreasing rates of vaccine-preventable diseases and associated morbidity (“Increasing Appropriate Vaccination: Vaccination Programs in Schools and Organized Child Care Centers”, 2009). This model removes a barrier for families who might not otherwise be able to take time off work to have their children vaccinated against influenza, and provides an efficient, convenient way for school-aged children to be vaccinated.
The Columbia/Boone County Department of Public Health and Human Services (PHHS) has provided school-located influenza vaccination (SLIV) clinics since the 2009 H1N1 flu pandemic. In the program’s first year, the federal government provided funding for the H1N1 vaccine, staff and supplies as part of the pandemic flu response. Vaccinations were provided to kindergarten through 12th grade students in all public schools and participating private schools in Boone County. Subsequent visits were made to elementary schools to provide second doses of flu vaccine to children age eight and younger, per Centers for Disease Control and Prevention (CDC) recommendations.

In 2010, funding provided by the Missouri Department of Health and Senior Services (MDHSS), and the American Recovery and Reinvestment Act (ARRA) covered the cost of the program. With decreased funding, the decision was made to focus on elementary schools (kindergarten through 5th grade). No return visits were made to provide second doses to children under age nine, but parents were encouraged to seek guidance from their healthcare provider or PHHS to determine if a second dose was needed.

No state or federal funding was available for the SLIV program in 2011, and PHHS believed the program would not be possible that year. Due to a generous donation from the David B. Lichtenstein Foundation, however, the program was fully funded and vaccinations were again offered to elementary students in all public and participating private schools in Boone County.

In 2012, PHHS again partnered with the David B. Lichtenstein Foundation to provide SLIVs. In addition, PHHS sought and received funding from Boonslick Kiwanis and Boone Electric Cooperative. PHHS also began a partnership with MU Children’s Hospital which provided Live Attenuated Influenza Vaccine (LAIV), the nasal spray flu vaccine. The program expanded to include middle school students. Columbia Public Schools middle schools consisted of 6th and 7th grade students. All other participating middle schools consisted of 6th through 8th grade students.

In 2013, PHHS continued their partnership with the David B. Lichtenstein Foundation and MU Children’s Hospital. The donation from the David B. Lichtenstein Foundation was utilized to purchase injectable flu vaccine and to pay for staffing, supplies and transportation. MU Children’s Hospital again provided LAIV. Due to the restructuring of middle schools in Columbia, the school-based efforts were expanded to include Columbia Public Schools 8th grade students as well.

An increase in support from the David B. Lichtenstein Foundation and MU Children’s Hospital was requested in 2014 in order to expand the program to include students of all ages (kindergarten through 12th grade) in Boone County and to universally provide quadrivalent vaccine. At that time, flu vaccine provided protection against three (trivalent) or four (quadrivalent) strains of influenza, depending on the type of vaccine used. The quadrivalent vaccine protects against two Influenza A viruses, and two Influenza B viruses. Public Health and Human Services decided to utilize all quadrivalent vaccine for the 2014-2015 flu season to provide students protection against as many strains of influenza as possible.

Level funding was requested for the 2015-2016 season from both the David B. Lichtenstein Foundation and MU Children’s Hospital. Due to a shortage of LAIV during the 2015-2016 season, MU Children’s Hospital was unable to provide all the requested doses of LAIV. However, they provided financial support for the purchase of additional doses of injectable influenza vaccine.

Vaccines for Children (VFC) vaccine has also been utilized for the SLIV program each year for children who qualify. Children who have Medicaid, are uninsured or underinsured qualify for vaccine through the VFC program.
Based on feedback from our school partners following the 2014-2015 flu season, a change in our process was made for the 2015-2016 season. It was suggested that letters to parents and consent forms be made available to the schools in the spring, allowing for distribution to parents during the summer and early fall via summer mailings, schedule pick-up, and back-to-school nights. This process was continued for the 2016-2017 season. An initial letter (Appendix A) and consent form (Appendix B) were sent electronically to all participating schools in late spring, 2016. Schools were responsible for making copies and distributing to families at their discretion.

Some schools, particularly elementary schools, sent consent forms and letters home with students. Other distribution methods used included e-mails to parents and announcements on school websites. Instructions for how to access the Vaccine Information Statements (VIS) were included in the letter that accompanied the consent form.

Due to a recommendation from the ACIP, LAIV was not available for the 2016-2017 season. This lack of LAIV availability created the need for an updated consent form and letter to be sent to the schools indicating that only Inactivated Influenza Vaccine (IIV) would be available for the school clinics. This issue is discussed in greater detail in the Limitations section of this report. The updated IIV-only initial parent letter (Appendix C) and consent form (Appendix D) were sent to the schools via e-mail in July 2016. In addition, a letter (Appendix E) was provided for those parents who completed the first version of the consent form indicating they wanted their child to receive LAIV. This letter informed parents that LAIV would not be available and asking that they complete the updated IIV-only consent form if they wanted their child to receive IIV at the school clinic in the fall.

A reminder letter was also provided as a template (Appendix F) to the schools in September 2016. This letter was used to remind parents of the upcoming clinic at their child’s school. Schools were able to customize this letter with school specific information (clinic date, time, location, etc.) and were responsible for customizing the letter, making copies, and distributing to families.

The program was an opt-in program, requiring parents to return the completed consent form to school in order for their child to participate. In general, consent forms were accepted and reviewed in advance of the school clinic. Late forms were also accepted and reviewed on the day of the clinic. On the consent form sent to the schools in April 2016, parents were given the option to select Live-Attenuated Influenza Vaccine (LAIV) which is administered intranasally or Inactivated Influenza Vaccine (IIV) which is administered by intramuscular injection. Parents also had the option to select “either vaccine method is fine”. The updated consent form sent to the schools in July 2016, did not give parents an option of vaccination method. It was explained that only IIV would be available for the 2016-2017 influenza season.

Clinic scheduling was coordinated between PHHS and school personnel, including nurses, administrators, and clerical support staff. Efforts were made to avoid scheduling conflicts with school trips, special events, lunch, end of day, etc. Permanent PHHS nursing staff was utilized at the school clinics to provide supervision of temporary nursing staff, coordinate clinic logistics, provide technical assistance and ensure vaccinations were administered safely and efficiently. Seven temporary nurses employed in previous years were re-hired to administer flu vaccinations at school. The use of nursing staff experienced in administering flu vaccinations in the school clinic decreased the need for extensive training and improved overall efficiency of the clinics.

Two hours were allotted for most clinic sites. The larger high schools in Columbia (Battle, Hickman
and Rock Bridge) were allotted two and a half hours due to the large volume of students. The number of nurses scheduled to work each clinic was calculated based on a formula. The formula was based on the conservative estimate that each nurse could administer 25 immunizations per hour. Assumptions were also made regarding anticipated participation rates. Past participation rates were used to predict 2016 participation rates. Adjustments in staffing were made closer to clinic dates when actual numbers were known based on number of consent forms submitted.

Calculation of Number of Nurses Needed for Flu Vaccination Clinic

\[ n = \frac{a(b)}{50} \]

- \( a \) = total school enrollment
- \( b \) = estimated participation rate
- \( n \) = number of nurses needed

Example: 500 students with 40% participation rate

\[ 500 \times (0.4)/50 = four \text{ nurses needed} \]

School staff (nurses, clerical staff and administrators) were instructed to review consent forms for completeness (name, date of birth, parental signature, screening questions answered, etc.). Consent forms were picked up by PHHS nursing staff 2-3 days prior to the flu clinic for review. Phone calls were made by PHHS nursing staff to parents for any clarifications and to discuss medical concerns that would make a child ineligible for vaccination.

Schools were required to provide sufficient space for the clinic along with a table, two chairs and a trash can for each vaccination station. Clinics were held in various locations based on the needs of the school. Locations included: media centers, cafeterias, gymnasiums, hallways, conference rooms and nurses' offices. PHHS provided: sharps boxes, alcohol pads, band-aids, tissues, hand sanitizer, table covers, cotton balls, needles and quadrivalent flu vaccine.

Many schools utilized parent volunteers, nursing students, and other school staff to escort students to the vaccination area and to manage students who were waiting in line. Elementary students were typically brought to the vaccination area by classroom. Middle and high school students were more challenging to coordinate because of the need for them to change classrooms during the clinic time frame. Some schools chose to call the older students down in alphabetical groups while others provided passes for all participating students and used runners to deliver passes to different hallways or classroom clusters within the building.

At least two unique identifiers were used by nursing staff for student identification and these identifiers were initialed on the consent form by the vaccinating nurse. When available, name and student number were used for positive identification. In situations where student numbers were not available, students were identified with name and date of birth. At times, the very young students were not able to state name, student number or date of birth. In these instances, positive identification was provided by the school nurse, teacher, or administrative staff.
A total of 59 schools participated in the 2016 SLIV program. This is an increase of two schools over the 2015 SLIV program. Columbia Public Schools added a new elementary school to the district in 2016, and one private school returned to the program after opting out in 2015. Twenty-seven schools had pre-school programs and 13 of those required a morning and an afternoon clinic to accommodate the class schedules. A total of 73 separate clinics were provided between September 27 and November 11, 2016.

During the 2016-2017 influenza season, PHHS nursing staff delivered a total of 9,032 doses of injectable flu vaccine in the school setting. This represents 35.3% of the total population of the schools served and an increase of 1,305 students vaccinated compared to 2015 (Table 1). High school students had an overall participation rate of 30% compared to 39.8% for elementary students and 32% for middle school students (Table 2). High school participation rates rose from 17.7% in 2014 to 23.5% in 2015 to 30% in 2016. The 2016 participation rate for high schools exceeded the stated goal for the season by 4%. School nurses attribute this increase to the change in process, allowing for consent forms to be available to parents prior to the start of school, rather than depending on students to take consent forms home for signature and return them to school. Elementary school and middle school participation rates increased from 36.3% to 39.8% and 27.8% to 32% respectively (Table 3). The 2016 participation rates for elementary and middle schools fell short of the stated goals for the season by 10.2% and 5% respectively. The increase over last year across all grades could be attributed to the timeliness of the vaccine clinics which began in late September and completed in early November. In addition, PHHS nursing staff delivered 998 doses of flu vaccine to children in the PHHS clinic setting and other community outreach venues resulting in a total of 10,030 children vaccinated during the 2016-2017 influenza season.

Table 1

<table>
<thead>
<tr>
<th>Years</th>
<th>Number Vaccinated</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>7,276</td>
</tr>
<tr>
<td>2010</td>
<td>4,703</td>
</tr>
<tr>
<td>2011</td>
<td>4,638</td>
</tr>
<tr>
<td>2012</td>
<td>6,373</td>
</tr>
<tr>
<td>2013</td>
<td>7,561</td>
</tr>
<tr>
<td>2014</td>
<td>8,959</td>
</tr>
<tr>
<td>2015</td>
<td>7,727</td>
</tr>
<tr>
<td>2016</td>
<td>9,032</td>
</tr>
</tbody>
</table>
Table 2

Percentage of Students Vaccinated by School Type - 2016

<table>
<thead>
<tr>
<th>School Type</th>
<th>Percentage Vaccinated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary School (Pre K-5th)</td>
<td>39.8%</td>
</tr>
<tr>
<td>Middle School (6th-8th)</td>
<td>32.0%</td>
</tr>
<tr>
<td>High School (9th-12th)</td>
<td>30.0%</td>
</tr>
<tr>
<td>Overall</td>
<td>35.6%</td>
</tr>
</tbody>
</table>

Table 3

Percentage of Students Vaccinated by School Type 2014-2016

<table>
<thead>
<tr>
<th>School Type</th>
<th>Percentage Vaccinated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary School (PreK-5th)</td>
<td>47.3%</td>
</tr>
<tr>
<td>Middle School (6th-8th)</td>
<td>33.8%</td>
</tr>
<tr>
<td>High School (9th-12th)</td>
<td>17.7%</td>
</tr>
</tbody>
</table>

- 2014
- 2015
- 2016
For the third year, a program evaluation was undertaken to determine school satisfaction with the SLIV program and to identify possible areas for improvement. On February 21, an on-line survey was sent to 63 contacts at the 59 schools that participated in the SLIV program. Of the 63 surveys sent, 37 responses were received for a response rate of 59%. The results were overwhelmingly positive with 36 respondents (97.3%) strongly agreeing or agreeing that they were satisfied with the SLIV program. In addition, 37 respondents (100%) strongly agreed or agreed that offering flu vaccine in the school is a benefit to the parents, and 35 respondents (95%) strongly agreed or agreed that offering flu vaccine in the school is a benefit to students. (Table 4).

Improvements were recommended for next year and will be discussed in the Conclusions section of this report. Survey results were shared with internal staff for quality improvement and planning purposes.

Table 4

Q2 Please check one box that best describes this year's flu clinic.

Answered: 37  Skipped: 0
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Limitations

On June 22, 2016 the Advisory Committee on Immunization Practices (ACIP) voted that LAIV should not be used during the 2016-2017 influenza season due to decreased effectiveness compared to IIV over the previous several influenza seasons. Because PHHS was made aware of this decision in early summer, PHHS was able to work with partners to ensure enough IIV would be available for the school clinics without delaying the start of the SLIV program or causing clinics to be scheduled into December. In response to requests from schools, PHHS e-mailed consent forms and parent letters to the schools in April 2016. The original consent form gave parents the option of LAIV or IIV. PHHS sent an updated version of the consent form to the schools on July 12 that only had injectable as an option as recommended by the ACIP. Having two versions of the consent form caused some confusion. Some schools had already printed and sent out the original version of the consent forms. This required school staff to contact parents who requested LAIV vaccine to determine if vaccination with IIV was acceptable for their child. Not all parents felt comfortable with their child receiving IIV, instead of LAIV, in the school setting.

Having consent forms early, and changing the consent form during the summer led to confusion for some parents and additional work for the school and PHHS nurses. Parents who forgot that consent for vaccination was given in late summer contacted the school nurse to verify that their child was enrolled in the clinic. Further confusion arose when parents filled out multiple consent forms for the same child. Parents who had given consent for their child to be vaccinated, and subsequently had their child vaccinated elsewhere without informing the school, led to some children being unnecessarily revaccinated.

The SLIV program in Boone County has adapted and grown each year since its beginning in 2009. Data collection and evaluation methods for the program have also changed over time. Problems with vaccine availability over the last three years (IIV in 2014 and LAIV in 2015 and 2016) and the changing scope of the program have contributed to the difficulty in providing a direct comparison of the program by year. Data collection for the last few years included a breakdown of participation by vaccination method and by grade. With consistent data collection, continued provision of vaccination to all grades going forward, and consistent vaccine availability, future comparisons can be made to evaluate program improvements and determine program successes.

Another gap in data is the lack of availability of absenteeism data. General absenteeism data and surveillance data from school nurses is submitted to PHHS weekly by the schools. However, this data does not include the symptoms and/or diagnosis of children who are absent from school due to illness. A better understanding of school absenteeism related to influenza like symptoms, would allow analysis of the effectiveness of the SLIV program.
Conclusion

School-based flu clinics are an efficient way to immunize large numbers of students (Hull, 2011) and have been found to lower incidence of influenza in schools and therefore reduce absenteeism (Pannaraj, 2014). These programs have also been found to provide a cost-savings to society both in direct costs and costs averted by disease prevention (Yoo, 2013). Furthermore, studies indicate that SLIV programs can provide indirect protection of other members of the community (Tran, 2014). The participating schools recognize the value and importance of providing school-based influenza vaccinations to students. Having convenient access to influenza vaccination in the school setting allows children to miss fewer days of school, maintain optimal health and succeed academically (Plasphol, 2014).

In the coming year, PHHS hopes to continue the SLIV program by offering quadrivalent flu vaccinations to students in kindergarten through 12th grade in Boone County. In addition, based on results of our program evaluation and recommendations from our partners, PHHS plans to do the following:

• Only IIV will be available for the 2017-2018 season, ensuring that a single version of the consent form is available to avoid confusion and unnecessary calls to parents.

• Continue to make vaccine consent forms and letters available to schools in the spring allowing schools the flexibility to decide when these items will be distributed to families.

• Initiate school clinics as early as possible (end of September) and complete clinics by early November.

• Create a tear off sheet that parents can keep as a reminder that they completed a flu vaccine consent for their child with instructions to inform the school if the child receives the vaccination elsewhere.

A recent study found that vaccinating at least 25% of students in a school decreased the incidence of influenza by more than 30% and vaccinating nearly 50% of the student population provided 54% indirect protection to unvaccinated children (Pannaraj, 2014). Short-term goals for the 2016 season were to increase participation rates to 26% for high schools, 37% for middle schools, and 50% for elementary schools, and the long term goal was to increase the overall participation rate to 40%. The program exceeded the goal for high school participation by 4%, but fell short of the goals for elementary and middle schools by 10.2% and 5% respectively. Short-term goals for the 2017 program are to increase participation in high school students from 30% to 32%, increase middle school participation from 32% to 35%, and increase elementary school participation from 39.8% to 42%. The long-term goal is to increase the overall participation rate from 35% to 40% by the 2019-2020 influenza season.

Program Information Dissemination

A copy of this report will be provided to both funding agencies with additional data available upon request. A copy of this report will also be provided to each participating school district and private school with additional data specific to the school district or private school. This report and additional data will also be available on the PHHS website at http://www.como.gov/health/.


Yoo, B.-K. e. (2013). Cost effectiveness analysis of elementary school-located vaccination against influenza-Results from a randomized controlled trial. Vaccine, 2156-2164.
Appendices

Appendix A
Initial Letter

Appendix B
Immunization Consent Form

Appendix C
IIV-Only Initial Letter

Appendix D
IIV-Only Consent Form

Appendix E
Letter for Secondary Consent Forms

Appendix F
Reminder Letter Template
Appendix A:
Initial Letter

CITY OF COLUMBIA/BOONE COUNTY, MISSOURI

DEPARTMENT OF PUBLIC HEALTH AND HUMAN SERVICES
DIVISION OF ADMINISTRATION

May 2016

Dear Parents/Guardians:

Subject: Free Flu Vaccine Will be Offered at School

Every flu season, thousands of children become sick with the flu, and some can become very sick. Getting the vaccine every year is the best way to protect your child from this potentially serious disease. The Centers for Disease Control and Prevention’s (CDC) Advisory Committee on Immunization Practices recommends all people over six (6) months of age get vaccinated.

Thanks to generous support from MU Children’s Hospital and the David B. Lichtenstein Foundation, the Columbia/Boone County Health Department is once again able to offer this year’s flu vaccine free of charge at Boone County schools. Flu vaccine will be available for all children in preschool through 12th grade. We are working with your child’s school to provide this year’s seasonal flu vaccine to children at their school. Vaccination clinics will be held this fall and you will be notified by your school of the dates once the clinics are scheduled. If you decide not to vaccinate, or if you do not return the required permission form to the school, the free seasonal flu vaccine will not be given to your child at school. The opportunity to get your child vaccinated is encouraged but not mandatory. This vaccine is free.

If you have questions about the vaccine or the vaccination clinics, contact your school nurse or the Columbia/Boone County Department of Public Health and Human Services at 573.874.7356. You can also learn more at http://www.ccc.gov/flu/. Beginning later in the fall, all Boone County children (age 6 months through 18 years old) can receive free flu vaccine at our clinic, located at 1005 West Worley in Columbia, Monday through Friday from 8 a.m. to 4:30 p.m. Walk-ins are welcome and no appointment is needed.

Sincerely,

Stephanie K. Browning
Director
Columbia/Boone County Department of Public Health and Human Services

1005 W. Worley St. • Columbia, Missouri 65205-6015
Phone: (573) 874-7355 • Fax: (573) 874-7756
www.CoMo.gov

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER/SERVICES PROVIDED ON A NONDISCRIMINATORY BASIS
2016 Influenza “Flu” Vaccine School-Based Clinic Consent Form

All questions must be answered. If you do not complete this form and return it to school, your child will not be vaccinated.

**SECTION 1: INFORMATION ABOUT THE CHILD TO RECEIVE VACCINE (PLEASE PRINT)**

<table>
<thead>
<tr>
<th>STUDENT’S NAME (Last)</th>
<th>(First)</th>
<th>(M.I.)</th>
<th>STUDENT’S DATE OF BIRTH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>MONTH</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SCHOOL NAME/GRADE/TEACHER</th>
<th>STUDENT’S AGE</th>
<th>STUDENT’S GENDER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>☐ Male ☐ Female</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DOES THE STUDENT HAVE HEALTH INSURANCE:</th>
<th>STUDENT NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ YES ☐ NO ☐ INSURED THROUGH MEDICAID (MO HEALTH NET)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STUDENT’S ADDRESS</th>
<th>DOES YOUR CHILD LIVE INSIDE THE CITY LIMITS OF COLUMBIA?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>☐ Yes ☐ No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CITY</th>
<th>STATE</th>
<th>ZIP</th>
<th>PARENT/GUARDIAN DAYTIME PHONE NUMBER(S):</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>PARENT/LEGAL GUARDIAN’S NAME (Last)</th>
<th>(First)</th>
<th>(M.I.)</th>
<th>PARENT/LEGAL GUARDIAN EMAIL ADDRESS (Optional)</th>
</tr>
</thead>
</table>

**SECTION 2: SCREENING FOR VACCINE ELIGIBILITY**

1. Does your child have a serious allergy to eggs? ☐ YES ☐ NO
2. Does your child have any other serious allergies? Please list: ☐ YES ☐ NO
3. Has your child ever had a serious reaction to a previous dose of flu vaccine? ☐ YES ☐ NO
4. Has your child ever had Guillain-Barré Syndrome (temporary severe muscle weakness) within 6 weeks of receiving a flu vaccine? ☐ YES ☐ NO

**SECTION 3: SCREENING FOR FLUMIST (NASAL SPRAY) ELIGIBILITY**

1. Has your child been vaccinated with any vaccine within the past 30 days? (including MMR and/or chicken pox) ☐ YES ☐ NO

<table>
<thead>
<tr>
<th>Vaccine:</th>
<th>Date given: Month</th>
<th>Day</th>
<th>Year</th>
</tr>
</thead>
</table>

2. Does your child have any of the following: asthma, diabetes (or other type of metabolic disease), or disease of the lungs, heart, kidneys, liver, nerves or blood? If Yes, please explain in the comments below. ☐ YES ☐ NO

3. Is your child on long-term aspirin or aspirin-containing therapy (for example, does your child take aspirin every day)? ☐ YES ☐ NO
4. Does your child have a weak immune system (for example, from HIV, cancer, or medications such as steroids or those used to treat cancer)? ☐ YES ☐ NO
5. Does your child have close contact with a person who needs care in a protected environment (for example, someone who has recently had a bone marrow transplant)? ☐ YES ☐ NO

**SECTION 4: VACCINE PREFERENCE**

There are two different ways we can give the 2016 influenza vaccine (a shot or a nasal spray). Please mark your preferred vaccine method, keeping in mind that if you marked “YES” anywhere in section 3, your child may not be eligible for Flumist (nasal spray):

☐ Either vaccine method is fine ☐ Flumist ONLY (nasal spray) ☐ Flu shot ONLY (injectable)

Comments: __________________________

--- SIGN BELOW: VACCINATION WILL NOT BE GIVEN WITHOUT PARENT/LEGAL GUARDIAN’S SIGNATURE ---

**SECTION 5: CONSENT FOR CHILD’S VACCINATION**

I UNDERSTAND THE RISKS AND BENEFITS AND GIVE CONSENT to the Columbia/Boone County Department of Public Health and Human Services and its staff for my child named on this form to be vaccinated with the 2016 influenza vaccine. I understand that a 2016 Vaccine Information Statement (VIS) will be provided at the time of vaccination, and I can access the VIS at: www.immunize.org/vis/

Signature Parent/Legal Guardian __________________________ Month __________ Day __________ Year __________

**SECTION 6: VACCINATION RECORD - FOR ADMINISTRATIVE USE ONLY**

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Date Dose Administered</th>
<th>Route</th>
<th>Dosage</th>
<th>VIS Given</th>
<th>Vaccine Manufacturer</th>
<th>Lot Number</th>
<th>Name and Title of Vaccine Administrator</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016 Influenza</td>
<td>/ /</td>
<td>☐ Intra nasal</td>
<td>☐ 0.5 cc</td>
<td>☐ IVIV Date: ______</td>
<td>☐ LANIV Date: ______</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix B: Immunization Consent Form

The school-based flu clinic program is provided through a partnership between the Columbia/Boone County Department of Public Health and Human Services, MU Children’s Hospital, and the David B. Lichtenstein Foundation. In 2014, almost 9,000 Boone County students were vaccinated against influenza as a result of this program. The organizations are committed to working together in order to keep students healthy.
July 2016

Dear Parents/Guardians:

Subject: Free Flu Vaccine Will be Offered at School

Every flu season, thousands of children become sick with the flu, and some can become very sick. Getting the vaccine every year is the best way to protect your child from this potentially serious disease. The Centers for Disease Control and Prevention's (CDC) Advisory Committee on Immunization Practices recommends all people over six (6) months of age get vaccinated with the injectable flu vaccine. The injectable flu vaccine (flu shot) is the only type of flu vaccine that will be offered. Due to a recommendation from the CDC, FluMist nasal spray will not be given this season.

Thanks to generous support from MU Children's Hospital and the David B. Lichtenstein Foundation, the Columbia/Boone County Health Department is once again able to offer this year's flu vaccine free of charge at Boone County schools. Flu vaccine will be available for all children in preschool through 12th grade. We are working with your child's school to provide this year's seasonal flu vaccine to children at their school. Vaccination clinics will be held this fall and you will be notified by your school of the dates once the clinics are scheduled. If you decide not to vaccinate, or if you do not return the required permission form to the school, the free seasonal flu vaccine will not be given to your child at school. The opportunity to get your child vaccinated is encouraged but not mandatory. This vaccine is free.

If you have questions about the vaccine or the vaccination clinics, contact your school nurse or the Columbia/Boone County Department of Public Health and Human Services at 573.874.7356. You can also learn more at http://www.cdc.gov/flu/. Beginning later in the fall, all Boone County children (age 6 months through 18 years old) can receive free flu vaccine at our clinic, located at 1005 West Worley in Columbia, Monday through Friday from 8 a.m. to 4:30 p.m. Walk-ins are welcome and no appointment is needed.

Sincerely,

Stephanie K. Browning, Director
Columbia/Boone County Department of Public Health and Human Services
2016 Influenza “Flu” Vaccine School-Based Clinic Consent Form

All questions must be answered. If you do not complete this form and return it to school, your child will not be vaccinated.

SECTION 1: INFORMATION ABOUT THE CHILD TO RECEIVE VACCINE (PLEASE PRINT)

<table>
<thead>
<tr>
<th>STUDENT'S NAME (Last)</th>
<th></th>
<th>STUDENTS DATE OF BIRTH</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(First)</td>
<td>(M.I.)</td>
<td>MONTH</td>
<td>DAY</td>
<td>YEAR</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SCHOOL NAME/GRADE/TEACHER</th>
<th>STUDENT'S AGE</th>
<th>STUDENT'S GENDER</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>DOES THE STUDENT HAVE HEALTH INSURANCE?</th>
<th>STUDENT NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STUDENT'S ADDRESS</th>
<th>DOES YOUR CHILD LIVE INSIDE THE CITY LIMITS OF COLUMBIA?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CITY</th>
<th>STATE</th>
<th>ZIP</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>PARENT/LEGAL GUARDIAN’S NAME (Last)</th>
<th>(First)</th>
<th>(M.I.)</th>
<th>PARENT/LEGAL GUARDIAN’S EMAIL ADDRESS (Optional)</th>
</tr>
</thead>
</table>

SECTION 2: SCREENING FOR VACCINE ELIGIBILITY

1. Does your child have a serious allergy to eggs?  

2. Does your child have any other serious allergies? Please list: ____________________________

3. Has your child ever had a serious reaction to a previous dose of flu vaccine?

4. Has your child ever had Guillain-Barré Syndrome (temporary severe muscle weakness) within 6 weeks of receiving a flu vaccine?

SECTION 3: VACCINE INFORMATION

The injectable flu vaccine (flu shot) is the only type of flu vaccine that will be offered. Due to a recommendation from the CDC, FluMist nasal spray will not be given this season.

--- SIGN BELOW: VACCINATION WILL NOT BE GIVEN WITHOUT PARENT/LEGAL GUARDIAN’S SIGNATURE ---

SECTION 4: CONSENT FOR CHILD’S VACCINATION

I UNDERSTAND THE RISKS AND BENEFITS AND GIVE CONSENT to the Columbia/Boone County Department of Public Health and Human Services and its staff for my child named on this form to be vaccinated with the 2016 injectable influenza vaccine (flu shot). I understand that a 2016 Vaccine Information Statement (VIS) will be provided at the time of vaccination, and I can access the VIS at: www.immunize.org/vis

Parent/Legal Guardian Signature ____________________________ Month _____ Day _____ Year ______

SECTION 5: VACCINATION RECORD - FOR ADMINISTRATIVE USE ONLY

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Date Dose Administered</th>
<th>Route</th>
<th>Dosage</th>
<th>VIS Given</th>
<th>Vaccine Manufacturer</th>
<th>Lot Number</th>
<th>Name and Title of Vaccine Administrator</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016 Influenza</td>
<td>/ /</td>
<td>IM RD LD</td>
<td>0.5 cc</td>
<td>IIIV4 Date:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix E: Letter for Secondary Consent Forms

Date

Dear Parent/Guardian:

The 2016 Influenza “Flu” Vaccine School-Based Flu Consent Form you turned in for your child indicated that you wanted your child to receive the FluMist nasal spray vaccine during the school flu clinic. Due to a recommendation from the Centers for Disease Control and Prevention in June 2016, the FluMist nasal spray will not be given this season.

If you would like your child to receive the injectable flu vaccine (flu shot) at school instead, the enclosed 2016 Influenza “Flu” Vaccine School-Based Clinic Consent Form must be:

- FULLY completed and SIGNED by the parent or legal guardian
- Completed for EACH CHILD (you must return a separate form for each child you want vaccinated)
- Returned to your school nurse by DATE

The 2016-17 injectable Influenza vaccine (flu shot) will be given free of charge. This opportunity to have your child vaccinated is strongly encouraged, but it is NOT mandatory.

The Vaccine Information Statement for the flu shot can be found at: http://www.immunize.org/vis/.
You may also contact your school nurse or the Columbia/Boone County Department of Public Health and Human Services for Vaccine Information Statements.

If you decline, or do not return the required permission form to the school, the free flu vaccine will not be given to your student at school.

If you return the consent form, and your child receives the flu vaccine elsewhere, it is important that you notify your school nurse immediately. This will prevent your child from receiving an unnecessary second dose of vaccine.

Boone County’s free flu vaccine program is made possible by these generous partners:

- MU Children’s Hospital
- David B. Lichtenstein Foundation

These organizations are funding free flu shots for all Boone County children age 6 months – 18 years of age. Children who do not get the vaccine at school may receive free flu shots at the health department clinic, 1005 West Worley, Monday – Friday from 8 am – 4:30 pm. No appointment is needed.

If you have any further questions please contact your school nurse, NAME, RN at PHONE NUMBER.
Appendix F: Reminder Letter Template

Date

Dear Parents/Guardians:

The 2016-17 injectable Influenza vaccine (flu shot) will be given free of charge to students at SCHOOL NAME on DATE 2016 from TIME-TIME. The Columbia/Boone County Department of Public Health and Human Services will be onsite to administer the vaccine in ROOM. This opportunity to have your child vaccinated is strongly encouraged, but it is NOT mandatory.

For your child to be vaccinated, the 2016 Influenza “Flu” Vaccine School-Based Clinic Consent Form must be:

- FULLY completed and SIGNED by the parent or legal guardian
- Completed for EACH CHILD (you must return a separate form for each child you want vaccinated)
- Returned to your school nurse by DATE.

The injectable flu vaccine (flu shot) is the only type of flu vaccine that will be offered. Due to a recommendation from the Centers for Disease Control and Prevention (CDC), FluMist nasal spray will not be given this season. The Vaccine Information Statement for the flu shot can be found at: http://www.immunize.org/vis/. You may also contact your school nurse or the Columbia/Boone County Department of Public Health and Human Services for Vaccine Information Statements.

If you decline, or do not return the required permission form to the school, the free flu vaccine will not be given to your student at school.

If you return the consent form, and your child receives the flu vaccine elsewhere, it is important that you notify your school nurse immediately. This will prevent your child from receiving an unnecessary second dose of vaccine.

Boone County’s free flu vaccine program is made possible by these generous partners:

- MU Children’s Hospital
- David B. Lichtenstein Foundation

These organizations are funding free flu shots for all Boone County children age 6 months – 18 years of age. Children who do not get the vaccine at school may receive free flu shots at the health department clinic, 1005 West Worley, Monday – Friday from 8 am – 4:30 pm. No appointment is needed.

If you have any further questions please contact your school nurse, NAME, RN at PHONE NUMBER.
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Prepared April 2017 by: Trina Teacutter, RN, BSN
Columbia/Boone County Department of Public Health
and Human Services
1005 West Worley, Columbia, MO 65203
T: 573-874-7355 E: health@CoMo.gov