CATTARAUGUS COUNTY BOARD OF HEALTH

Public Health
Prevent. Promote. Protect.
Cattaraugus County Health Department
Established 1923

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Joseph Bohan, MD, *President* ***Giles Hamlin, MD,*** *Vice-President*

Zahid Chohan, MD
Sondra Fox, RN
Richard Haberer
Theresa Raftis
David L. Smith, Mayor
James Snyder, Legislator
Kathryn Cooney Thrush, NP

MINUTES
February 7, 2018

The 862nd meeting of the Cattaraugus County Board of Health was held at The Point Restaurant, 800 East State Street, Olean, New York on February 7, 2018.

The following members were present:

Dr. Joseph Bohan	Mayor David Smith
Sondra Fox, RN	Jim Snyder, Legislator
Dr. Giles Hamlin	Kathryn Cooney Thrush, NP
Theresa Raftis	

Also present were:
Kevin D. Watkins, MD, MPH, Public Health Director
Eric Firkel, County Attorney
Dr. Gil Witte, Medical Director
Barb Hastings, Legislator
Donna Vickman, Legislator
Rick Miller, Olean Times Herald
Lynne Moore, Director of Nursing
Dave Porter, Hearing Officer
Raymond Jordan, Sr. Public Health Sanitarian
Debra Lacher, Secretary to Public Health Director
Thomas Lecceadone, Administrative Officer
Eric Wohlers, Environmental Health Director

The meeting was called to order by Dr. Bohan. The roll was called and a quorum declared. Dr. Hamlin made a motion to approve the minutes of the Board of Health (BOH) meeting held on December 12, 2017, it was seconded by Ms. Raftis and the motion was unanimously approved.

Dr. Witte made a motion to approve the minutes of the Professional Advisory Board meeting held on October 18, 2017, it was seconded by Dr. Hamlin and the motion was unanimously approved.

DIRECTORS REPORT: Dr. Watkins reported that during the week of January 27th the influenza activity level was categorized as geographically widespread. This is the eighth consecutive week that widespread activity has been reported. There were (11,683) laboratory confirmed influenza reports in New York State, which is a 50% increase over the week prior. Of the (126) specimens that were tested at Wadsworth Center (91) were actually positive for influenza. Influenza A (H3N2) continues to predominate.

There were (2,221) patients hospitalized with laboratory confirmed influenza in NYS, a 21% increase over the week prior to Jan 27th. There has been (1) confirmed influenza associated pediatric death reported in NYS this season, but recently within New York City, there were (2) additional pediatric deaths reported which will bring the count to (3). Cattaraugus County has reported (217) laboratory confirmed influenza cases, (132) or 61% were influenza A and (85) or 39% were influenza B. Secondary to 13%-15% absenteeism by both faculty and students with influenza like illness, the Salamanca Schools were closed this past Monday in order to disinfect common areas. Recent public health warnings about the severity of this year's influenza epidemic, continues to lead news reports. Mainly due to the rapid onset of respiratory distress, the sudden need for respiratory support, and the number of young adults and children who have died after contracting influenza. To date, there have been (53) pediatric deaths reported nationwide by the Centers of Disease Control and Prevention (CDC).

During the 2016-2017 influenza season the influenza overall effectiveness was 42%. Vaccine effectiveness against influenza A(H3N2) virus during this time period was 32%, and the vaccine effectiveness against influenza A(H1N1) was 54% and the vaccine effectiveness against influenza B virus was 56%. A 2016-2017 vaccine effectiveness handout from CDC, was provided to those in attendance. Page 8 of the handout, showed the low vaccine effectiveness rate in all age groups especially for the age group 18-49 with a 12% effectiveness rate, and for those in the age group greater than 65 and older, the effectiveness rate was only 25%. This year's vaccine contains the same influenza A(H3N2) virus components as what was in the 2016-2017 vaccine.

Many experts speculate that the inability to mount an immunity against the H3N2 component of the vaccine can be a good reason why we are seeing such an unusually high number of young people, and seniors suffering so severely this year with complications secondary to contracting the H3N2 strain of influenza and why there has been an increase number of deaths in these same age groups, even among those who have received the 2017-2018 influenza vaccine. In addition to contracting influenza, a number of individuals are also contracting a bacterial infection that can lead to pneumonia as a complication of having influenza. Unfortunately the influenza season can last into May, but the department will continue to stress the importance of protective measures that can be taken to avoid contracting and transmitting influenza from others. Dr. Witte added that if a person gets influenza despite getting the vaccine, the symptoms may be less severe for having had the vaccine, therefore he still encourages patients to get the vaccine. There are more people with influenza than the reports are stating; the rapid influenza test conducted in provider offices are not counted in the reports and many people choose not to go to a medical provider for treatment. Dr. Bohan added that 80% of the deaths of children around the country have been children who were not vaccinated. Legislator Snyder, asked Dr. Watkins how Olean General Hospital (OGH) was handling the influx of people with influenza. Dr. Watkins responded that the emergency room has seen an increased number of admissions to the emergency room for influenza like illnesses in addition, the hospital is restricting visitors to those 17 and older (except obstetrics/maternity, siblings only) until further notice. Dr. Witte added that the hospital is busy but manageable.

Dr. Watkins reviewed the fee schedule for clinic immunization rates with a proposed effective date of 3/1/18 which was handed out to those in attendance. Dr. Bohan asked for an approval of these proposed rates. Legislator Snyder asked if the rates ever go down. Dr. Watkins stated that yes occasionally rates will decrease as in the case of this year's tetanus and diphtheria (Td) vaccine.

A motion was made by Mayor Smith to accept the 2018 proposed clinic fee schedule, the motion was seconded by Dr. Hamlin and unanimously approved.

Dr. Watkins presented a list of uncollected 2017 debit that were being carried on the 2018 accounts receivable books. He requested the Board's approval to send the 2017 uncollected debt to the legislature in order to write off the debit from the department's books. He stated that these items were sent to collection but there has been no action on the uncollected debt. The total charge off requested by the department is $8,298.96, this includes Homecare $4,615.39, Family Planning $1,002.28, Immunization Clinic $781.29, and Water $1,900.00. The 2016 write offs totaled $16,745.95, and 2017 write off request has significantly decreased. These fees that are being written off, are mostly patient's co-pays, or co-insurance. A motion was made by Ms. Raftis to accept this debit as uncollectable and send the debt to the legislature to write it off the department's account receivables, the motion was seconded by Mayor Smith, and unanimously approved.

Dr. Watkins discussed a handout that was provided by Dr. Witte regarding policy recommendations to address the problem of Electronic Nicotine Delivery Systems (ENDS) in NYS. This publication was released by New York State Public Health Association (NYSPHA) in their fight to regulate electronic cigarettes. NYSPHA released five evidence based recommendations to help reduce the negative consequences of ENDS products, which included:

1. Include all tobacco and ENDS products in the New York Clean Indoor Air Act.
2. Increase the legal age for purchases of all tobacco products, including ENDS, to 21.
3. Increase the tax rate on ENDS and E-liquids and bring ENDS taxes into parity with other tobacco products.
4. Invest in public health education about ENDS products.
5. Maximize education, support, and access for FDA approved cessation strategies for consumers and health care practitioners.

Recent reports have shown an increase use of electronic devices amongst minors. There is a nationwide effort to increase the age to purchase tobacco products, including electronic devices. In NYS, nine counties and New York City have enacted local laws to raise the age of sale to 21 for tobacco and ENDS products, which now covers more than half the state's population. Cattaraugus County has been a pioneer in the State of New York, and continues to be one of the major leaders in health policy. Dr. Watkins shared that he will be speaking on a panel in Allegany County where they too are looking at passing a similar law.

Dr. Bohan asked about the status of the education campaign regarding not smoking in cars with children. Dr. Watkins replied that recent funding received by Universal Primary Care (UPC) for this project created a collaboration effort between UPC and the Health Department. Educational ads were put on social media, local radio stations, local newspapers and penny-savers. Western New York Public Health Alliance (WNYPHA), which the department is a member, recently presented a symposium on the "The Rise of Electronic Cigarettes and Implications for Public Health Policies and Practices", in Ellicottville. The department was able to showcase its educational campaign regarding the risk of smoking in cars with children on board.

Dr. Watkins thanked Dr. Witte for taking on the temporary duties of the Medical Director for the jail.

Dr. Watkins shared the plaque and certificate that the department received for reaching accreditation status, he stated that accreditation last for five years before the department must apply for re-accreditation status.

Sondra Fox and Theresa Raftis met as the nominating committee prior to the BOH meeting. Mrs. Fox shared that the nominating committee's recommendations for the 2018 BOH officers were Dr. Joseph Bohan for President and Dr. Giles Hamlin for Vice President. A motion was made by Legislator Snyder to accept the recommendations, the motion was seconded by Mayor Smith, and unanimously approved.

NURSING DIVISION REPORT: Mrs. Moore, director of patient services, reported that the homecare census was currently at (310) patients with (102) admissions in January, and (29) admissions to date in February. The Maternal Child Health program has (7) patients and (34) children in the lead program. The testing rate for lead is 63.59% for one year olds, and 57.53% for two year olds. The lead program conducted (21) capillary lead tests in January, the highest lead level tested was 8.3ug/dl and that child was sent for venous confirmation and the results are pending. The lead program participated in six WIC clinics in January.

In January, the communicable disease program had (20) cases of Chlamydia, (5) cases of Gonorrhea, and (1) early latent Syphilis case. In addition, there were (4) reported Hepatitis C cases, (3) Lyme disease cases, and (2) cases of group Strep B isolated.

Additionally, there were (2) rabies post exposure prophylaxis treatments given in January, one patient woke up to a bat in their sleeping quarters and the bat was not able to be captured, the other was a dog bite where the dog or its owner could not be found after the incident.

Upon retirement of Patti Williams, Supervisor Community Health Nurse, a new Community Health Nurse, Shawna Trudeau, will be taking over the immunization program in the clinic. The nurses participated in a Glaxo Smith Kline presentation on the new Shingrix vaccine, which appears to offer significantly better protection against shingles than the previous shingle vaccine Zostavax.

Due to the high rate of influenza the department held an additional community flu clinic on January 25th, with (40) people in attendance. The department still has influenza vaccine left for ages 6 months and older and several high dose influenza vaccine for those 65 and older.

Legislator Mr. Snyder asked if there were any new information with the Weston Mills construction project. Dr. Watkins replied that construction has begun on the additional 21 bed facility but no new details other than CAReS has begun to receive funding from NYS Office of Alcoholism and Substance Abuse Services (OASAS) for this capital project. The need is still there currently, there is a wait list of (10) individuals who are looking for placement. Dr. Watkins reported that there is a decrease in the number of opioid deaths in Cattaraugus County, as well as the number of call outs for first responders secondary to opioid overdoses. More resources are being provided throughout the community and there is hope that this trend continues.

ENVIRONMENTAL HEALTH DIVISION REPORT: Mr. Wohlers shared that since the Board adopted the new ordinance for food service manager trainings that the department has spoken with Cattaraugus Community Action who will provide the classroom servsafe training.

The department is updating the information that will be distributed to local restaurant owners, and fielding calls from individuals wanting to register for the training. In addition there is also the option to take the course online.

Due to staff fielding questions regarding the food service manager training, staff took the servsafe food manager training course. Rick Miller, Olean Times Herald reporter, asked if the environmental health staff took the test. Mr. Jordan stated that yes staff took the practice and diagnostic test and passed. Spanish and English are both available online, Community Action did procure a book in Chinese but they have no one who speaks Chinese at the Center for translation purposes. A mailing is being prepared for all the temporary food permit operators who will also need to complete this training.

It was recently announced that New York State was providing new funding for research, assessment, and investigation of the harmful Algae blooms that occur on the lakes in New York. The State Health Department, and the Department of Conservation is creating a new source water protection work group to discuss ideas and issues related to source water protection. (Source water provides water for public drinking water supplies and private water wells). At the annual environmental health summit, one of the workshop session will include the topic "harmful Algae blooms, and the proper health department response". The State and private labs do not have enough capacity to handle all the additional monitoring that needs to be done on public drinking water supplies due to the toxins that are produced by these Algae blooms.

The department is working on the 2018 water sampling schedules that needs to be completed on the (100+) community water systems. Additionally, staff is working on assisting our operators with preparing their annual water quality reports that are due out today.

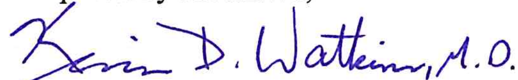
There is a comprehensive water improvement project taking place in Randolph, which has been in the works for about five to six years.

Staff is catching up on past due restaurant inspections that need to be completed for 2017. Mr. Jordan is looking at comprehensively changing work assignments due to retirements, new staff, and the change of work flow.

ENFORCEMENT REPORT: Mr. Porter reported no new enforcements this month.

There being no further business to discuss, a motion to adjourn was made by Ms. Raftis, and seconded by Dr, Hamlin, and unanimously approved.

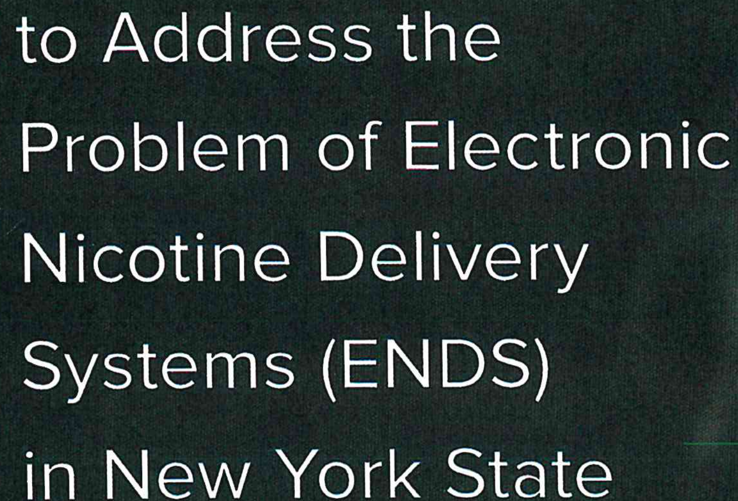
Respectfully submitted,



Kevin D. Watkins, M.D., M.P.H.
Secretary to the Board of Health

New York State
PHA
Public Health
Association

POLICY RECOMMENDATIONS



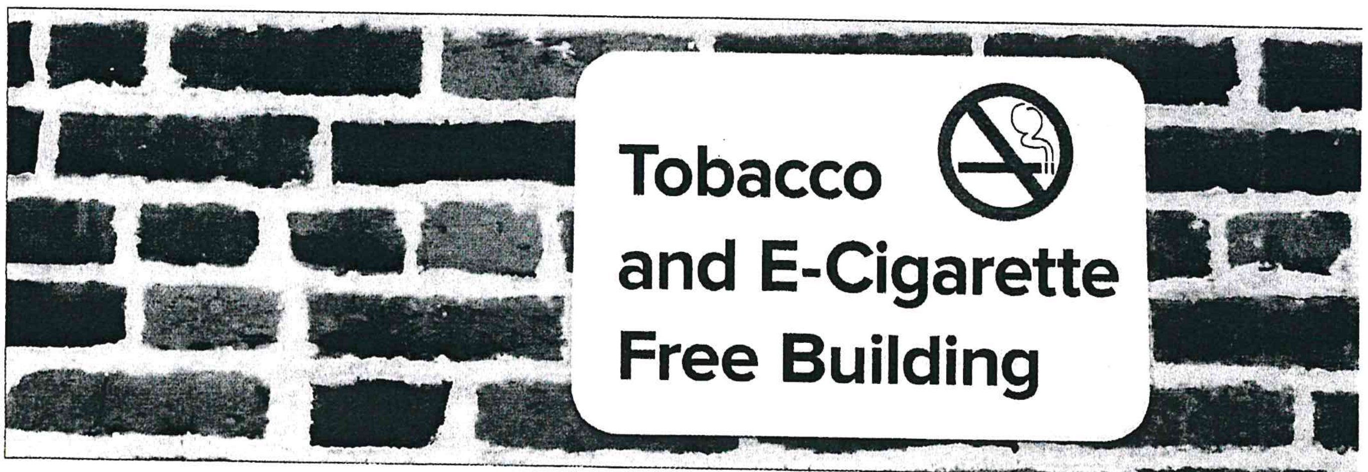
to Address the Problem of Electronic Nicotine Delivery Systems (ENDS) in New York State

EXECUTIVE SUMMARY

Electronic Nicotine Delivery Systems or "ENDS" refer inclusively to all forms of electronic cigarettes and similar products whether they contain nicotine or not. These are products that produce an aerosolized mixture containing flavored liquids and usually nicotine that is inhaled by the user. Like conventional cigarettes and other combustible tobacco products, the use of ENDS products pose serious public health risks and concerns that need to be addressed. Presently, there are few regulations applied to ENDS products to protect consumers. In February 2017, the New York State Public Health Association, the American Cancer Society, and the New York State Health Foundation, convened a group of experts to develop recommendations focused on the use and sale of ENDS products in New York State (NYS).

This group of experts and stakeholders gathered to discuss and debate three main areas of inquiry related to ENDS: 1) youth access, 2) tobacco cessation, and 3) health effects. Five priority recommendations for consideration by state and local decision-makers were generated from the proceedings. These recommendations reflect the top five, evidence-based opinions of the individuals attending the ENDS Summit to help reduce the negative consequences of ENDS products:

1. Include all tobacco and ENDS products in the New York Clean Indoor Air Act.
2. Increase the legal age for purchases of all tobacco products, including ENDS, to 21.
3. Increase the tax rate on ENDS and E-liquids and bring ENDS taxes into parity with other tobacco products.
4. Invest in public health education about ENDS products.
5. Maximize education, support, and access for FDA approved cessation strategies for consumers and health care practitioners.



BACKGROUND

Electronic Nicotine Delivery Systems or "ENDS" refer inclusively to all forms of electronic cigarettes (e-cigarettes) and similar devices whether they contain nicotine or not. These are products that produce an aerosolized mixture containing flavored liquids and usually nicotine[1] that is inhaled by the user. The use of ENDS products raises serious concerns for public health. Perhaps most concerning is the increased use of ENDS products among youth and young adults because of the exposure to harmful chemicals and nicotine on developing brains. In addition, the Surgeon General found that while more research is needed, evidence from several longitudinal studies suggests that e-cigarette use is "strongly associated" with the use of other tobacco products among youth and young adults, including conventional cigarettes.[4] ENDS products are marketed aggressively in ways that have been prohibited for cigarettes since the 1998 Master Settlement Agreement or before.[2] These marketing tactics have included unproven claims of safety and use for smoking cessation[3].

There are more than 450 ENDS products available on the market, including but not limited to e-cigarettes and vape pens. These devices heat a liquid into an aerosol that the user then inhales. The liquids almost always contain nicotine[1], as well as varying compositions of flavorings, propylene glycol, glycerin, and other ingredients. Given the variability and lack of regulation to date, the ingredients in many flavored e-cigarette liquids are not known or have not been tested.

Efforts to address the increasing use of ENDS products, particularly by youth, are being led nationally by the U.S. Surgeon General, the Department of Health and Human Services and the U.S. Centers for Disease Control and Prevention. For example, the 2016 Surgeon General's Report entitled E-Cigarette Use Among Youth and Young Adults, chronicles the research to date on ENDS and youth and makes recommendations to reduce ENDS use and prevent the negative impact of ENDS on young people.[4] Also in 2016, the FDA finalized a rule that extends its regulatory authority to all tobacco products, including e-cigarettes, cigars, hookah and pipe tobacco, as part of its goal to improve public health.[5]

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1 Marynak K. et. al., Sales of Nicotine-Containing Electronic Cigarette Products: United States, 2015. AM J PUBLIC HEALTH. 2017;107:702–705. https://www.ncbi.nlm.nih.gov/pubmed/28323467

2 Tobacco Control Legal Consortium. The Master Settlement Agreement: An Overview. http://www.publichealthlawcenter.org/sites/default/files/resources/tclc-fs-msa-overview-2015.pdf

3 Centers for Disease Control and Prevention. Office on Smoking and Health, Electronic Nicotine Delivery Systems: Key Facts. https://www.cdc.gov/tobacco/stateandcommunity/pdfs/ends-key-facts-oct-2016.pdf

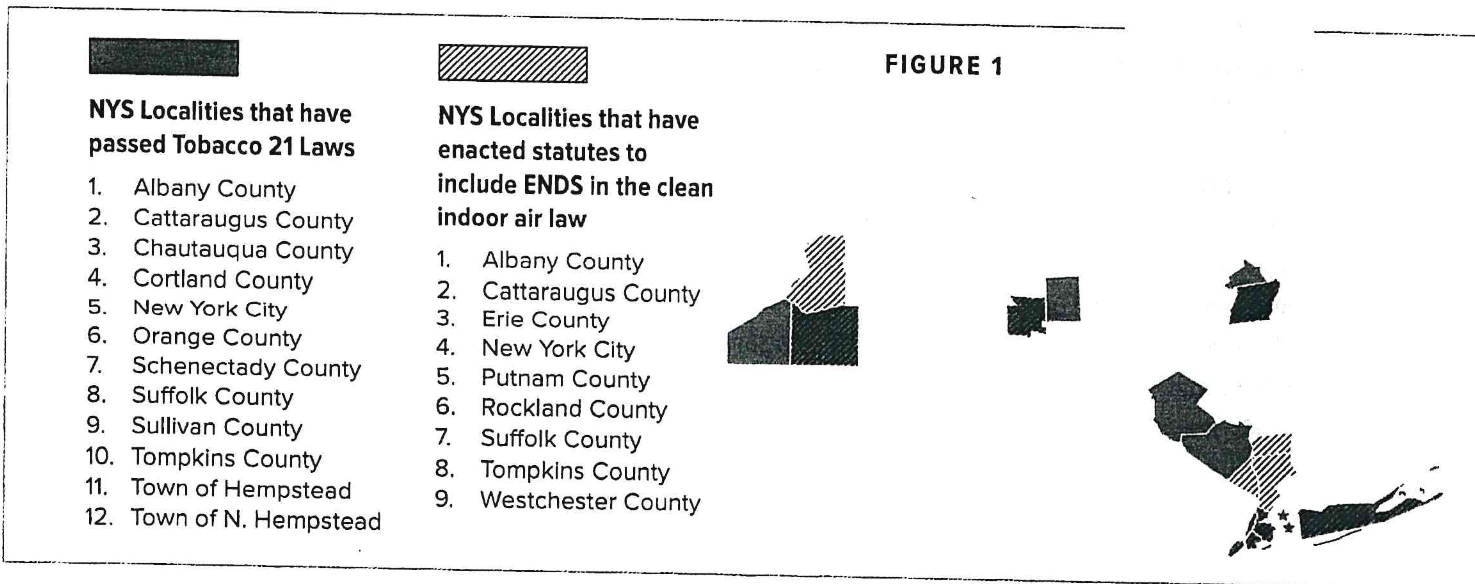
4 U.S. Department of Health and Human Services. E-Cigarette Use Among Youth and Young Adults. A Report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2016.

5 U.S. Food and Drug Administration. https://www.fda.gov/ForConsumers/ConsumerUpdates/ucm506676.htm, Page Last Updated: 03/31/2017

The new rules are mostly focused on reducing access to ENDS among those under 18 years of age. In addition, the new rule established an ENDS product review process that will allow the FDA to evaluate factors such as ingredients, product design, health risks, and a products' appeal to youth and non-users. In May 2017, before the final rules could take full effect, the FDA announced that the agency will be delaying enforcement measures for three months to allow time for additional review.[6]

New York State Regulatory Environment

In late 2014, New York State enacted a law to protect children from liquid nicotine by requiring child-proof caps on all nicotine-containing e-liquids.[7] There is a nation-wide effort to increase the legal age for purchasing tobacco products (including ENDS) and two states have passed the legislation.[9] In the past few years, nine counties plus New York City have also enacted local legislation to raise the age of sale to 21 for tobacco and ENDS products, which now covers more than half the state's population. In addition, eight counties and New York City have enacted laws to close the ENDS loophole in the Clean Indoor Air law.[8] Eight states plus the District of Columbia prohibit smoking and the use of ENDS in indoor areas of private worksites, restaurants, and bars.[9]



6 New York Times. May 2, 2017. FDA delays enforcement of stricter standards for e-cigarette, cigar industry. https://www.washingtonpost.com/politics/fda-suspends-enforcement-of-stricter-standards-for-e-cigarette-cigar-industry/2017/05/02/be7e557a-2ed6-11e7-9534-00e4656c22aa_story.html?utm_term=.7cb7f76d62f0

7 New York State. https://www.governor.ny.gov/news/governor-cuomo-announces-legislation-prevent-liquid-nicotine-sales-minors-and-require.

8 American Cancer Society Cancer Action Network, May 6, 2017

9 Centers for Disease Control and Prevention. STATE System. 2016.

BACKGROUND: NEW YORK STATE ENDS SUMMIT

In January 2017, Governor Cuomo of New York proposed in his FY2018 Executive Budget to establish a tax of 10 cents for every milliliter of fluid used in electronic cigarettes.[10] In addition, the proposal defined electronic cigarette use as smoking, which would automatically require ENDS to be covered by New York's Clean Indoor Air Act and the Adolescent Tobacco Use Prevention Act that bans smoking on school property. Although both houses supported the ENDS measures in their own budget proposals, in the end, the efforts of the tobacco industry and the vaping retailers led to the ENDS proposals being removed.[11] In May 2017, the debate was revised when the State Assembly passed legislation that would add electronic cigarettes to the state's Clean Indoor Air Act.

In April, 2017, New York City's Mayor Bill De Blasio announced his support for a legislative package that would raise the minimum cost of cigarettes to $13 per pack, increase the tax on other tobacco products, cap the number of tobacco and e-cigarette retailers, prohibit pharmacies from selling tobacco products, and require apartment buildings to adopt and disclose smoking policies.[12] All of the tobacco control policies being discussed in the New York City Council have implications for ENDS products if enacted and could help reduce their normalization and uptake, especially among youth.

New York State ENDS Summit

Given the dramatic rise in the use of END products in New York and the lack of product regulation and oversight to date, the New York State Public Health Association and the American Cancer Society, in partnership with the New York State Health Foundation, convened a group of experts (see Appendix A) on February 10, 2017 to identify and prioritize recommendations focused on the use and sale of ENDS products in New York State. The increasing prevalence of ENDS product usage among youth and adults has raised three distinct, yet inter-connected public health questions that were the focus of discussion.

The questions were meant to identify the most important strategies related to:

1. decreasing nicotine exposure and initiation of combustible cigarette smoking among youth;
2. reducing the prevalence of disease associated with long-term tobacco use and determining whether ENDS products have a role; and
3. decreasing the direct and indirect exposure to harmful chemicals in ENDS products.

The Summit agenda included an overview of surveillance data and the scientific literature on ENDS, a summary of interventions that have been implemented in NYS and other regions of the US, breakout sessions dedicated to the three priorities, and final identification of priority recommendations to impact ENDS in New York State.

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10 NYS FY 2018 Executive Budget Briefing Book

11 USA Today. Indoor e-cig ban snuffed out of NY budget. April 10, 2017. https://www.usatoday.com/story/news/politics/albany/2017/04/10/indoor-e-cig-ban-drops-out-ny-budget/100300000/

12 Bloomberg. NYC Mayor De Blasio Proposes Raising Cigarette Pack Price to $13. April 20, 2017. www.bloomberg.com.

Question 1: What are the most important strategies to reduce access to ENDS, decrease nicotine exposure and delay initiation of cigarette smoking among youth?

Concerns and Considerations

Nearly all adult smokers start smoking in their youth. Experts agree that preventing the commencement of smoking is of primary importance in preventing the onset of tobacco dependence, tobacco-related diseases and premature death.[4] Additionally, there are many concerns associated with the impact of nicotine on the developing adolescent brain, including lasting cognitive and behavioral impairments.[15]

Despite having seen a long-term decline in cigarette use among youth in New York, ENDS use among youth is increasing dramatically (see Figure 2).[10] Data suggests that the use of ENDS products that contain nicotine by youth increases the likelihood of their smoking combustible tobacco. For example, one study found that youth who used e-cigarettes were more than six times as likely to start smoking combustible tobacco than those who did not.[16]

ENDS products are marketed using some media channels and approaches that have been banned for cigarettes since the 1998 Master Settlement Agreement or before with tobacco companies, to address marketing targeted specifically to youth.[17] These include TV, radio, print media, billboards, the Internet, and social media ads.

In 2009, because flavoring of combustible cigarettes was attractive to young people, the FDA banned flavored cigarettes, other than menthol, as part of the

Among NYS high school students, cigarette smoking rates have decreased from 27.1% in 2000 to 4.3 % in 2016.[13]

The use of ENDS among NYS youth nearly doubled between 2014 and 2016, when one in five high school students (20.6%) reported the use of ENDS.[13]

More than 43.8% of high school students in NYS report having tried ENDS.[13]

Never smoking U.S. adolescent and young adult e-cigarette users at baseline were 8.3 times more likely to progress to cigarette smoking after 1 year than non-users of e-cigarettes.[14]

13 New York State Department of Health. Youth Tobacco Survey, 2016.

14 Primack, Brian, Soneji, Samir, et al, Progression to Traditional Cigarette Smoking After Electronic Cigarette Use Among US Adolescents and Young Adults, JAMA., 2015.

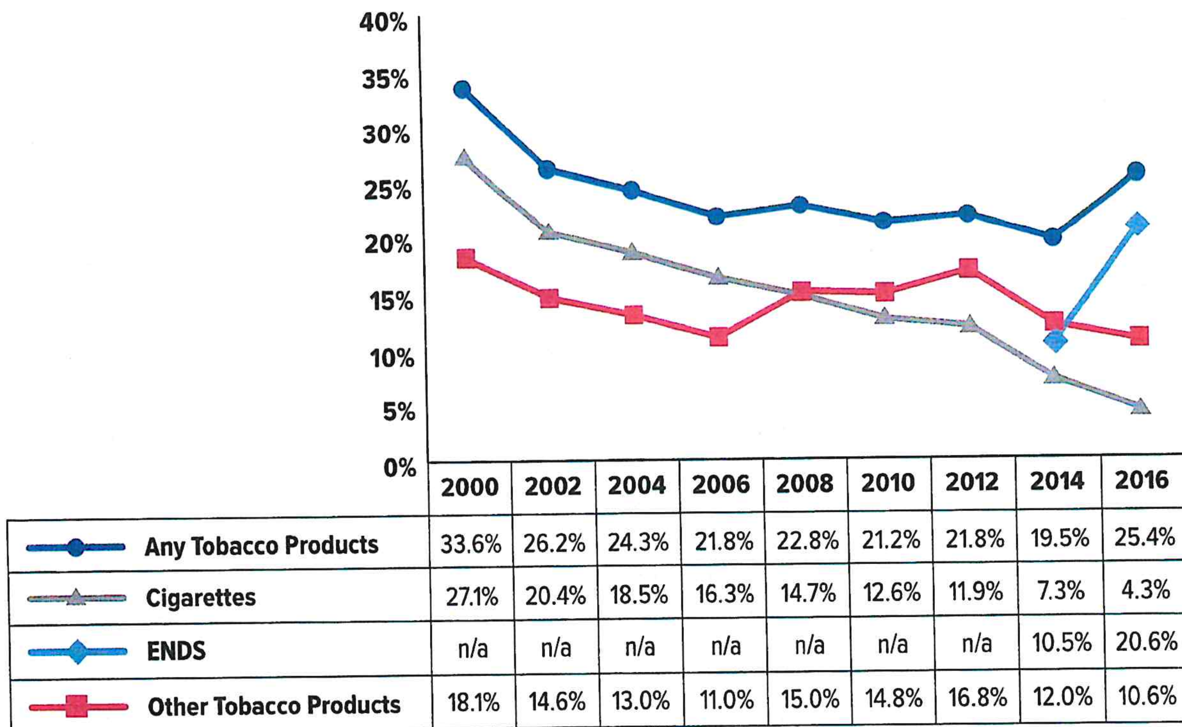
15 Yuan M, Cross SJ, Loughlin SE and Leslie FM. Nicotine and the Adolescent Brain. J PHYSIOL. 2015; 593 (16).

16 (Barrington-Trimis JL, Urman R, Berhane K, et.al. E-Cigarettes and Future Cigarette Use. PEDIATRICS. 2016;

17 Campaign for Tobacco-Free Kids. July 9, 2003. Summary of the Master Settlement Agreement (MSA). http://www.tobaccofreekids.org/research/factsheets/pdf/0057.pdf

effort to reduce youth smoking.[18] Today, ENDS products come in more than 7,000 flavors that similarly attract youth, such as, bubble gum, grape, and unicorn flavors. In a 2014 survey, nearly two-thirds of youth e-cigarette users reported using flavored e-cigarettes.[18]

FIGURE 2 **Trends in Any Tobacco Product Use Among High School Students in NYS, 2000–2016**



	2000	2002	2004	2006	2008	2010	2012	2014	2016
Any Tobacco Products	33.6%	26.2%	24.3%	21.8%	22.8%	21.2%	21.8%	19.5%	25.4%
Cigarettes	27.1%	20.4%	18.5%	16.3%	14.7%	12.6%	11.9%	7.3%	4.3%
ENDS	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10.5%	20.6%
Other Tobacco Products	18.1%	14.6%	13.0%	11.0%	15.0%	14.8%	16.8%	12.0%	10.6%

Source: New York State Department of Health, Bureau of Tobacco Control. Youth Cigarette Use at All-Time Low. ENDS Use Doubles. StatShot. Vol. 10, No. 1/Mar 2017. https://health.ny.gov/prevention/tobacco_control/reports/statshots/volume10/n1_youth_cigarette_and_ends_use.pdf

18 Corey et al. Flavored Tobacco Product Use Among Middle and High School Students—United States, 2014. MMWR. October 2, 2015 / 64(38);1066-1070.

ENDS PRODUCTS AND TOBACCO CESSATION

Question 2: What are the most important strategies to reduce the prevalence of disease associated with long-term tobacco use and can ENDS play a role?

Concerns and Considerations

Under the right circumstances, e-cigarettes could benefit public health if they help significantly reduce the number of people who use conventional cigarettes and ultimately die of tobacco-related disease. If there is to be a public health benefit from e-cigarettes, it will only come if they are effective at helping smokers end the use of cigarettes and if they are responsibly marketed so they do not re-glamorize tobacco use among young people. However, the evidence to date in the United States is limited and conflicting as to whether they are actually effective at helping smokers quit. In October 2015, the U.S. Preventive Services Task Force comprehensively evaluated the evidence to date and concluded that "the current evidence is insufficient to recommend electronic nicotine delivery systems for tobacco cessation...". ENDS are not currently approved by the FDA for smoking cessation; yet, ENDS marketing has included unproven claims of safety and use for smoking cessation. The evidence shows that among both youth and adults, concurrent or dual use of combustible tobacco and ENDS is high, which will likely not reduce tobacco-related chronic diseases and death.[3, 19]

In 2015, close to 3 out of 4 smokers reported that their health care provider advised them to quit smoking, while only 1 out of 2 smokers reported that their health care provider offered assistance to quit.[20]

More than 27% of smokers used ENDS products the last time they tried to quit.[20]

Nearly 8% of current smokers report that their health care provider advised that they use ENDS products to make a quit attempt.[20]

FDA approved cessation medications include a variety of gums, patches, lozenges, sprays, and inhalers that serve as nicotine replacement therapies and two prescription medications that do not contain nicotine. No ENDS producer has ever applied to the Federal Drug Administration to become certified as a cessation product. Many experts and public health professionals report that approved cessation products are not as widely promoted or accessible as they could be and medical professionals need to be better educated in the use and efficacy of tobacco dependence medications. The implementation of proven tobacco cessation treatment has not been maximized by providers assisting patients with quitting.[20] Evidence shows that a recommendation and/or prescription for an approved cessation method from a health care provider can double or triple the chance that a smoker will quit.[21] Unfortunately providers receive very limited training in tobacco dependence treatment specifically, and addiction in general.[22] Time constraints, inadequate health plan reimbursement, and perceived patient resistance have also been reported as reasons for not assisting patients to quit using evidence-based methods.[21]

19 King. B. Office on Smoking and Health, Centers for Disease Control and Prevention. Presentation: Public Health Promise or Peril? The Rise of E-Cigarettes and Implications for Tobacco Control Policy and Practice. Jan. 2017.

20 New York State Department of Health, New York Adult Tobacco Survey, 2015.

21 U.S. Public Health Service. Clinical Practice Guideline. Treating Tobacco Use and Dependence. 2008.

22 Ram. A., and Chisolm MS. The Time is Now: Improving Substance Abuse Training in Medical Schools. ACAD PSYCHIATRY. 2016 Jun;40(3):454-60.

ENDS PRODUCTS AND TOBACCO CESSATION

Given the mixed results and questions about the quality of existing research, the scientific consensus on using ENDS for cessation is that additional research, including well-designed randomized clinical trials and longitudinal, population studies are necessary before their use should be recommended for smoking cessation.[23] In the meantime, effective treatments do exist and when prescribed properly with more vigilant support, these methods can help patients to quit and reduce the likelihood of long-term dual use of cigarettes and ENDS.

Taxation Strategies to Increase Smoking Cessation

New York State's cigarette excise taxes are the highest in the country ($4.35 per pack), but ENDS products are taxed at significantly lower rates than cigarettes. New York City has local excise tax of $1.50 per package of traditional cigarettes, bringing the combined tax rate to $5.85. NYS currently has no excise tax on ENDS products but state sales taxes do apply. Studies have shown that for every 10 percent increase in the price of cigarettes, there is approximately a 4 percent reduction in overall cigarette consumption[24] and a 6.5 percent reduction in youth consumption.[25] Low-income adults, youth, and pregnant women are especially likely to quit or reduce their smoking when prices increase.[26, 27] Experts agree that tax parity among all tobacco products (including ENDS) is important to discourage youth initiation, discourage dual use of ENDS and combustible tobacco, and to raise revenue to support prevention and cessation programs.[28] The American Cancer Society's Cancer Action Network recommends that in addition to tax parity for all tobacco products, tax increases should be large enough to produce a meaningful reduction in tobacco consumption.

SUMMARY OF SELECT TAXES ON ENDS IN THE U.S.[37]

California - Tax will increase to 65.08% of the wholesale price on July 1, 2017.

Kansas - E-liquid tax of $0.20 per milliliter of consumable material and proportionate tax on all fractional parts otherwise (2016).

Minnesota - E-cigarettes and e-liquid are subject to the tobacco tax, which is currently 95 percent of the wholesale price.

North Carolina -Taxes liquid nicotine at 5 cents per milliliter (2014).

Pennsylvania - Tax rate is 40% of the wholesale price (2016).

District of Columbia - E-cigarettes are exempt from sales tax, however they have an excise tax of 67% of the wholesale price (2015).

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Question 3: What are the most important strategies to reduce the direct and indirect exposure to chemicals in ENDS products?

- *14.2% of people have reported seeing someone smoke ENDS in a restaurant in the past 30 days in NYS.*[20]
- *22.3% of people report seeing someone use ENDS in a bar in the past 30 days in NYS.*[20]

Concerns and Considerations

Studies suggest that ENDS products and ENDS aerosol contain harmful chemicals and the devices, cartridges, and liquid refills are mostly unregulated. Proponents of ENDS often refer to their emissions as vapor, implying water vapor; however, most ENDS do not contain any water. In fact, most ENDS produce aerosols, which contain many different chemicals that can cause eye and respiratory irritation, including short-term peripheral airway constriction.[29, 30] Sleiman et. al. found the presence of propylene oxide in e-liquid and glycidol in vapors, both compounds considered possible or probable carcinogens. These compounds are produced from heating the solvents propylene glycol and glycerin, two common constituents of e-liquid, and therefore likely to be present in ENDS emissions.[31]

ENDS and ENDS-related products pose a major risk of nicotine toxicity through ingestion or skin absorption of liquid nicotine. Less than half a teaspoon of a concentrated nicotine solution can be fatal to the average 26 pound, 20-month-old child.[32]

The long-term exposure effects of ENDS products are unclear, and due to their exclusion from the Clean Indoor Air Act they are being used indoors in public spaces such as bars and restaurants. Although studies suggest that nicotine and other toxin levels are lower in ENDS than in traditional cigarettes, research has shown that they can produce toxic aerosols,[33] carcinogens,[34] and heavy metals to which bystanders may be exposed.[35]

POTENTIALLY HARMFUL INGREDIENTS IN ENDS PRODUCTS[35]

- *propylene glycol*
- *fine/ultrafine particles*
- *harmful metals*
- *carcinogenic tobacco-specific nitrosamines*
- *volatile organic compounds*
- *carcinogenic carbonyls (most in low/trace concentrations)*

29 Grana R. et al., 2014, Callahan-Lyon, 2014.

30 Callahan-Lyon P. Electronic Cigarettes: Human Health Effects. TOB CONTROL. 2014;23

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33 Czogala J, Goniewicz ML, Fidelus B, et al. Secondhand Exposure to Vapors from Electronic Cigarettes. NICOTINE TOB RES. (2013; doi: 101093/ntr/ntt203.)

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SUMMARY OF POLICY RECOMMENDATIONS

1. Include all tobacco and ENDS products in the Clean Indoor Air Act.

Current New York State law prohibits the use of combustible tobacco in all indoor worksites and public areas. Several statewide health groups have been advocating to close the ENDS loophole in this law for the past few years. The bill has passed the NYS Assembly twice in the past but was stalled in the Senate. In May 2017, the State Assembly passed A516 that would add electronic cigarettes to the state's Clean Indoor Air Act. The same bill, S2543, is being considered once again in the State Senate.

2. Limit access by increasing the legal age for purchases of all tobacco products, including ENDS to 21.

At least 95% of smokers initiate cigarette use by the age of 21. Based on a systematic review of the literature, a 2015 Institute of Medicine report concluded that implementing Tobacco 21 is likely to reduce smoking prevalence nationally by 12% and tobacco-related mortality by 10% over the long-term. All of New York City, eight counties and two towns in New York State have raised the age for purchasing cigarettes and ENDS to age 21 meaning that a majority of the state's population is covered by this law that protects young people. Seven of the counties have passed Tobacco 21 laws in the last year. State Tobacco 21 bills exist in both houses of the New York State legislature (S3978 / A273) where there is growing support for the measure.

SUMMARY OF SELECT ENDS POLICIES BY STATE

- *Eleven states plus D.C. have added ENDS to their clean indoor air laws (New Jersey, Oregon, California, Delaware, Vermont, North Dakota, Hawaii, Utah, Oklahoma, Connecticut and Maine).*[37]
- *California and Hawaii have increased the age for purchasing tobacco products and ENDS to 21.*[36]
- *Eleven states include ENDS in their definition of a tobacco product.*[37]

36 Preventing Tobacco Addiction Foundation. http://tobacco21.org/state-by-state/

37 National Conference of State Legislatures, 2016. http://www.ncsl.org/research/health/state-e-cigarette-regulations-postcard.aspx

3. Increase the tax rate on ENDS and ENDS-Related products to achieve parity with other tobacco products.

Youth are at greatest risk from using ENDS but are also most sensitive to price increases. As the State and New York City increased excise taxes on tobacco products over the past decade the youth smoking rate dropped dramatically. Youth are now increasingly using ENDS which have no excise tax in New York at present. The state excise tax rate on cigarettes is currently $4.35 per package. The New York City local excise tax is $1.50 per package, bringing the combined tax rate to $5.85. The statewide tax on cigars and other tobacco products is 75% of the wholesale price. The tax on moist snuff is $2.00 per ounce. Increasing taxes has been shown to decrease smoking especially in low-income communities, pregnant women, and youth.

4. Invest in public health education about ENDS.

The State should provide consistent and evidence-based messages about the health risks of ENDS use and exposure to the chemicals in secondhand aerosol. Targeted messages should be focused on parents, teachers, coaches, and other influencers of youth as well as providers, vulnerable populations and the general public. Youth may require different messages that focus on the influence of the tobacco and vaping industries and how their marketing is designed to manipulate and addict teens to create lifelong customers. Youth empowerment approaches such as the Truth Campaign and "Reality Check" in New York have been used successfully to help reduce youth smoking.

5. Maximize education, support, and access to FDA approved cessation strategies for consumers and health care practitioners.

New York State Medicaid Managed Care plans are now covering all FDA approved cessation medications, but there is a knowledge deficit among providers and consumers about that coverage. More importantly, efforts must be increased to educate providers to help avoid under-treating highly addicted smokers who often relapse and then lose confidence in effective treatment modalities. With only 50.5% of smokers reporting that their providers assisted them with smoking cessation counseling or medications in New York, far more can be done to optimize the use of proven smoking cessation treatments.[20]

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Likewise, the contents of this document reflect the majority views of the panelists and do not necessarily reflect the official views of the New York State Public Health Association, the American Cancer Society, or the other organizations represented at the February 2017 New York State ENDS Summit.

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National Center for Immunization & Respiratory Diseases

Influenza Vaccine Effectiveness, 2016-17

US Flu VE Network
&
US Hospitalized Adult Influenza Vaccine Effectiveness Network (HAIVEN)

Jill Ferdinands, PhD
CDC Influenza Division
Meeting of the Advisory Committee on Immunization Practices (ACIP)
June 21, 2017

US Flu VE Network:
Vaccine effectiveness against influenza A/B, 2016–17

					Vaccine Effectiveness			
	Influenza positive		Influenza negative		Unadjusted		Adjusted*	
Any influenza A or B virus	N vaccinated/Total	(%)	N vaccinated/Total	(%)	VE %	95% CI	VE %	95% CI
All ages	883/2052	(43)	2761/5153	(54)	35	(27 to 41)	**42**	**(35 to 48)**
Age group (yr)								
6 mo–8 yr	106/353	(30)	709/1318	(54)	63	(53 to 71)	**61**	**(49 to 70)**
9–17	123/402	(31)	245/606	(40)	35	(15 to 50)	**35**	**(13 to 61)**
18–49	203/529	(38)	716/1629	(44)	21	(3 to 35)	**19**	**(-1 to 34)**
50–64	203/442	(46)	537/909	(59)	41	(26 to 53)	**42**	**(26 to 55)**
≥65	248/326	(76)	554/691	(80)	21	(-8 to 43)	**25**	**(-5 to 46)**

* Multivariate logistic regression models adjusted for site, age, sex, race/ethnicity, self-rated general health status, days from illness onset to enrollment, and calendar time of illness onset

US Flu VE Network:
Vaccine effectiveness by subtype, 2016–17

	Influenza positive		Influenza negative		Vaccine Effectiveness: Unadjusted		Vaccine Effectiveness: Adjusted*	
	N vaccinated/Total	(%)	N vaccinated/Total	(%)	VE %	95% CI	VE %	95% CI
Influenza A/H3N2								
All ages	619/1349	(46)	2761/5153	(54)	27	(17 to 35)	**34**	**(24 to 42)**
Age group (yr)								
6 mo–8 yr	71/203	(35)	709/1318	(54)	54	(37 to 66)	**51**	**(33 to 65)**
9–17	78/258	(30)	245/606	(40)	36	(13 to 53)	**31**	**(3 to 50)**
18–49	143/352	(41)	716/1629	(44)	13	(-10 to 31)	**12**	**(-13 to 32)**
50–64	145/299	(49)	537/909	(59)	35	(15 to 50)	**34**	**(12 to 50)**
≥65	182/237	(77)	554/691	(80)	18	(-17 to 43)	**25**	**(-10 to 48)**
Influenza A/H1N1pdm09								
All ages	8/26	(31)	2761/5153	(54)	61	(11 to 83)	**54**	**(-11 to 81)**

* Multivariate logistic regression models adjusted for site, age, sex, race/ethnicity, self-rated general health status, days from illness onset to enrollment, and calendar time of illness onset

US Flu VE Network:
Vaccine effectiveness by B lineage, 2016–17

	Influenza positive		Influenza negative		Vaccine Effectiveness			
					Unadjusted		Adjusted*	
	N vaccinated/Total	(%)	N vaccinated/Total	(%)	VE %	95% CI	VE %	95% CI
Influenza B								
All ages	238/650	(37)	2761/5153	(54)	50	(41 to 58)	**56**	**(47 to 64)**
Influenza B/Yamagata								
All ages	215/579	(37)	2761/5153	(54)	49	(39 to 57)	**55**	**(45 to 63)**
Influenza B/Victoria								
All ages	21/63	(33)	2761/5153	(54)	57	(27 to 74)	**60**	**(31 to 77)**

* Multivariate logistic regression models adjusted for site, age, sex, race/ethnicity, self-rated general health status, days from illness onset to enrollment, and calendar time of illness onset

2016-2017 Influenza Vaccine Components

A/California/7/2009 (H1N1)pdm09-like virus

A/Hong Kong/4801/2014 (H3N2)-like virus

B/Brisbane/60/2008-like virus (B/Victoria lineage)

B/Phuket/3073/2013-like virus (B/Yamagata lineage)

2017-2018 Influenza Vaccine Components

A/Michigan/45/2015 (H1N1)pdm09–like virus

A/Hong Kong/4801/2014 (H3N2)-like virus

B/Brisbane/60/2008–like virus (Victoria lineage)

B/Phuket/3073/2013–like virus (Yamagata lineage)