

Public Health Dental Hygienists Report: The Work of PHDHs in Five Local Health Offices in Vermont in 2016

Key Findings

The Vermont Department of Health is composed of one central office and 12 local health offices throughout the state. Currently, there are four half-time and one full-time Public Health Dental Hygienist (PHDH) positions in the state. This program is relatively new, with the goal of expanding to new locations in Vermont. PHDHs work to create an environment that supports early preventive dental care for families. They also help bridge the divide between medicine and dentistry, and support dental public health programs at the local level.

- PHDHs had over 3,500 appointments with WIC participants in 2016.
 - 44% of appointments with children did not have a dental home (meaning they had not visited the dentist in the last 6 months). Another 21% had a dental home, but were high risk.
 - 55% of appointments with pregnant women did not have a dental home.
 - 39% of appointments with postpartum women did not have a dental home.
 - PHDHs saw 3,179 unique individuals, which was 37% of the WIC participants in their Local health offices. Of WIC participants, PHDHs saw:
 - 29% of infants,
 - 42% of children,
 - 32% of postpartum and breastfeeding women, and
 - 39% of pregnant women.
- PHDHs applied fluoride varnish at 468 WIC participant appointments (mostly children).
- PHDHs also had 149 appointments with non-WIC individuals (mostly adults) in 2016.
- PHDHs conducted 73 outreach activities in 2016, reaching about 1,300 individuals, including dentists, medical providers, teachers, day care providers, students, and community members, to name a few. They worked with 43 partners.

Background Information about the Public Health Dental Hygienist (PHDH) Program

One of the goals of the Division of Health Promotion and Disease Prevention (HPDP) is to focus preventive efforts on low SES and minority/ethnic populations. The local health offices see families in WIC that reflect those demographic groups. In 2014, 1,718 (9%) Medicaid-eligible children aged 1-5 years were treated for extractions, endodontics or restorations. Of those children, 23% were treated in a hospital setting for a total of \$1,907,344 paid claims and an average of \$4,829 per visit. A linkage of Medicaid and WIC files found that 81% of the mothers of the children requiring hospitalization had been enrolled in WIC either prenatally or postpartum in 2009. The primary goal of the Office of Oral Health is to reduce the number of children treated in a hospital setting with very early prevention at the local level, focused on pregnant women and children ages 0-4 eligible for Medicaid. In Vermont, the eligibility criteria for WIC and Medicaid are the same.

The secondary goal is to integrate oral health into overall health. The Public Health Dental Hygienists (PHDHs) work towards establishing close communication at the local level with pediatricians, obstetrics/gynecologists and family physicians, dentists, dental hygienists and Tooth Tutors. Additionally, PHDHs also connect and work with childcare facilities, Head Start and other entities such as FQHCs.

The Public Health Dental Hygienists:

- Provide direct care service in WIC clinic by educating participants and staff, conducting oral health risk assessment, applying fluoride varnish to children, and coordinating care (transportation, health insurance, etc.) for those who need it.
- Deliver community education by doing outreach and training to medical and dental providers and supporting community organizations.
- Support prevention programs such as community water fluoridation, the Tooth Tutor Program, and access to care.

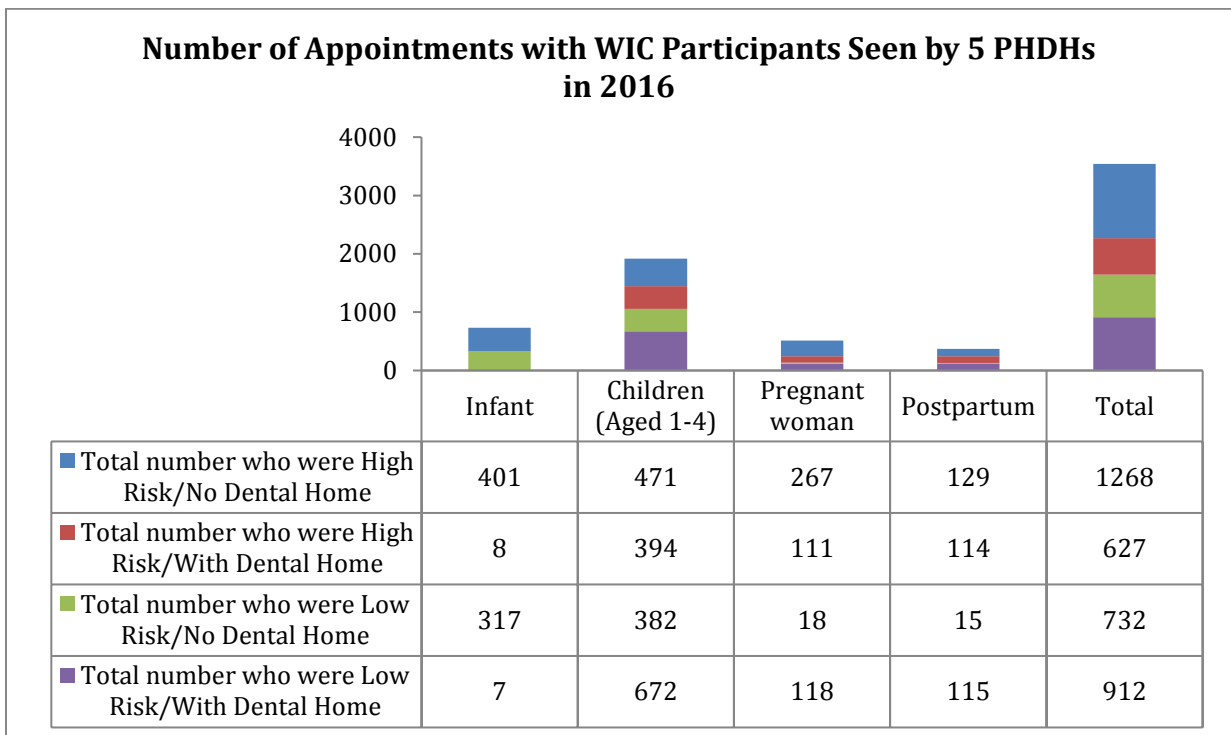
Currently, there are four half-time and one full-time PHDH positions in the state. This program is relatively new, with the goal of expanding to new locations in Vermont. Therefore, it is considered to be in the planning and implementation stages. This report addresses the activities the PHDHs completed in 2016.

PHDH Appointments with WIC Participants

Five Public Health Dental Hygienists had 3,539 appointments with WIC participants in 2016, including:

- 733 appointments with infants
- 1,919 (aged 1-4) appointments with children
 - 44% did not have a dental home (meaning they had not visited the dentist in the last 6 months). Another 21% had a dental home, but were high risk.
- 514 appointments with pregnant women
 - 55% did not have a dental home.
- 373 appointments with postpartum women
 - 39% did not have a dental home.

Most WIC participants had only one appointment with a PHDH in 2016. There were 3,179 unique individuals seen for a total of 3,539 appointments.

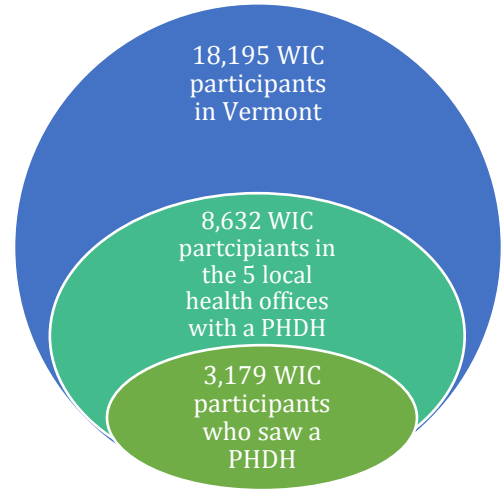


WIC Participants Who Saw a PHDH

Seven local health offices did not have a PHDH so about 9,500 WIC participants did not have the opportunity to meet with a PHDH.

The Burlington local health office is the only office with a full-time PHDH. Brattleboro, Morrisville, Newport, and St. Albans have part-time PHDHs. PHDHs saw 37% (3,179) of the 8,632 WIC participants in their local health offices in 2016, including:

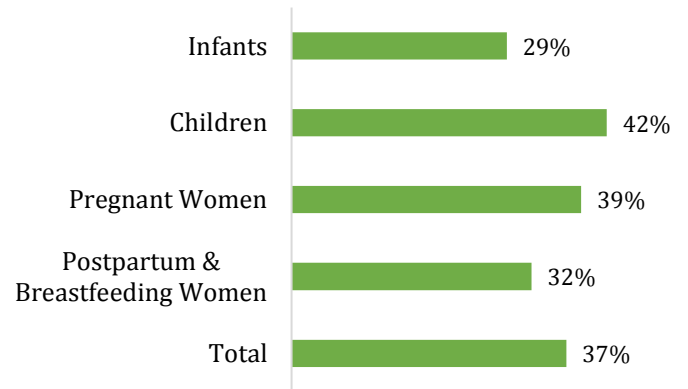
- 29% of infants,
- 42% of children,
- 39% of pregnant women, and
- 32% of postpartum and breastfeeding women.



Number of WIC Participants and Number Who Saw a PHDH (2016)

Infants	# Seen by PHDH	697
	# of WIC Participants	2,415
Children	# Seen by PHDH	1,708
	# of WIC Participants	4,042
Pregnant Women	# Seen by PHDH	433
	# of WIC Participants	1,115
Postpartum & Breastfeeding Women	# Seen by PHDH	341
	# of WIC Participants	1,060
Total	# Seen by PHDH	3,179
	# of WIC Participants	8,632

% of WIC Participants who Saw a PHDH (2016)



Fluoride

PHDHs applied **fluoride varnish at 468 WIC participant appointments**. Almost all of these participants were children.

Of the 471 children's appointments where the child was high risk without a dental home, 37% of them received fluoride varnish. Of children's appointments where the child was high risk with a dental home, 46% received fluoride varnish.

Percent of Child Appointments with a PHDH who Received Fluoride Varnish (2016)

High Risk/No Dental Home	37%
High Risk/With Dental Home	46%
Low Risk/No Dental Home	12%
Low Risk/With Dental Home	7%
Total	23%

The Vermont Department of Health Laboratory (VDHL) will test private wells or springs for fluoride for families with children 4 years of age and younger for free. PHDHs recommended participants test their well water for fluoride at 66 appointments. Most participants were on public water systems, particularly in Burlington.

PHDH Recommended Testing Well Water at WIC Participant Appointments (2016)

Yes	66
On public water system	2,977
Not interested in testing	41
Previously tested	74
No children under 5	10
Missing information	371

PHDH Appointments with non-WIC

PHDHs also had **149 appointments with non-WIC individuals** (mostly adults) in 2016. Most were high risk with no dental home.

Outreach Activities

PHDHs conducted 73 outreach activities in 2016, reaching about 1,300 individuals, including dentists, medical providers, teachers, day care providers, students, and community members, to name a few.

PHDHs conducted 43 different outreach activities, some more than once, totaling **73 outreach activities**, including:

- From the First Tooth (FTFT) (10 times)
- Age 1 training (8 times)
- Craniofacial clinic (6 times)
- Local health office staff meeting (3 times)
- Distribute OB/Age 1 Dental Packages (3 times)
- 802 Quits Lunch + Learn (2 times)
- New Moms Group hospital (2 times)
- Oral Health Education and Awareness (2 times)
- Oral Health Presentation and Program information (2 times)
- WIC Oral Health Class (2 times)
- Peer counselors for Breast feeding moms
- Read labels: How much Sugar?
- Adult Dental Care Day
- Adult Oral Health Meeting
- Bobbin Mill Early learning
- Children's Dental Health Month- Class presentation
- Derby Field Day
- ECHO Early learning program
- EHS/HS Health Advisory Meeting
- Family Fun Day
- Family Network presentation
- Family room Early learning
- Fluoridation: Tap into your Health
- Kiddie Garden
- Kids Wellness Day
- Kurn Hattin Spring Fling
- Learning Academy Outreach
- Lund family center
- New American safety day
- Oral Health and the Pregnant Patient
- Oral Health at PlayWorld
- Oral Health-Prenatal & ECC
- Pregnancy and Baby Expo
- Presentation to Minority Advisory Committee
- Promoting dental checkup for Pregnant WIC clients via mail
- Restorative Justice Center
- St Albans City School Request for Oral Health Presentation
- Swanton School Extension Thursday
- Tina Lothian's Daycare
- Visit to Winooski family center
- VNA family room
- Wellness Health day
- WIC Oral Health Class and Fluoride Application

PHDHs **reached over 1,300** individuals through outreach activities, including:

- schools - families
- moms at mom's group
- children
- low-income adults
- mothers, parents
- community members
- people recently discharged from prison
- parents supporting children with Cleft lip/palate
- coalition member
- dental office staff
- dentists
- hygienists
- dental assistants
- physicians
- medical students/residents
- nurses
- physician assistants
- practice manager
- others in physician's office
- OB-GYN students
- daycare providers
- school staff
- teachers
- water operators
- Home Visitor Staff
- Local health office staff
- peer counselors for Breast feeding moms
- staff supporting families with mental and physical disability
- representatives of different minority groups
- United Way

43 key partners were involved in these outreach activities. Examples include:

- Dental practices
- Bennington Oral Health Coalition
- Birthing RN
- Brattleboro Memorial Hospital
- Building Bright Futures
- Children Integrated Services
- Dentists
- Early Education Services
- Eden Central School
- Head Start
- Irasburg School
- Kurn Hattin contact
- Little one university
- Lund
- North Country Hospital
- OB practices
- Orleans Central Supervisory Union
- Other PHDHs
- Peer counselors
- RiseVT
- Ronald McDonald Care Mobile
- Rockingham/Springfield Pediatrics
- Turning Points School
- United Way
- University of Vermont - AHEC
- University of Vermont Medical Center
- Vermont Department of Health
- Vermont Family Network
- Vermont Rural Water Association
- Visiting Nurse Association
- Wellness Center
- WIC
- YMCA
- YMCA/ECHO center

Hygienists mentioned several **successes** of these activities. Just a few include:

- Increased knowledge amongst the public about oral health information. They were engaged and appreciative of the information.
- Hygienists felt more confident about the Age 1 population after the course.
- Some practices started to see children at age 1.
- Connected people with dental care.
- Children were engaged in formulating list of healthy versus unhealthy snacks for teeth and had lots of questions.
- Increased awareness about Medicaid dental coverage and safety of dental treatment during pregnancy.

Methods

The data in this report relies on self-reported data from PHDHs. Public Health Dental Hygienist used a spreadsheet to track the various data in this report about their appointments with WIC and non-WIC participants, from the risk category of the participant to whether or not a participant received fluoride varnish. They track their outreach activities in an additional spreadsheet.