

Key Findings about NDQuits

In fiscal year 2020 (July 1, 2019-June 30, 2020)



Prepared March 2021 for:

Neil Charvat

Director, Tobacco Prevention and Control Program

Division of Community & Health Systems

North Dakota Department of Health

NORTH
Dakota | Health
Be Legendary.™

Prepared by Professional Data Analysts:

Alyce Eaton, MHR | Melissa Chapman Haynes, PhD | Sam Friedrichsen, MPH | Lily Dunk

Report purpose and contents

This report provides an assessment of NDQuits in fiscal year (FY) 2020 (July 1, 2019 – June 30, 2020), including **who received services, how they used the program, and program outcomes**.

Report main body contents:

Background (p. 3) – More information about NDQuits

Outcomes (p. 6) – Quit rates, program satisfaction

Reach (p. 10) – Enrollment trends, referral sources

Services (p. 14) – Use of NDQuits service offerings

Participants (p. 17) – Participant demographics, nicotine use trends

Conclusions (p. 22) – Overall conclusions, recommendations

Appendices:

Reference Appendix (p. 24) – More detail, including metrics featured in past reports for ongoing comparison.

Table Appendix (p. 34) – Comparison tables (1) of NDQuits participants this year to last year and (2) between different NDQuits programs versus statewide statistics.

Methods Appendix (p. 39) – Information about the data and methods of evaluation and analysis used in this report.

Key terms for this report:

Most detail in this report is in the appendices, but there are several key acronyms and initialisms referred to multiple times. These are:

ATS – The American Tobacco Survey, which provides statewide data about nicotine use. The data used here is from 2019.

BRFSS – The Behavioral Risk Factor Surveillance System, like the ATS, provides statewide data and was last conducted in 2019.

ENDS – Electronic Nicotine Delivery Systems, also known as vaping devices, vapes, or e-cigarettes.

NAQC – The North American Quitline Consortium is the umbrella organization of quitlines in the U.S. and Canada and shares data and quality benchmarks across quitlines.

NRT – Nicotine Replacement Therapy, which provides a controlled amount of nicotine to reduce cravings and assist with quitting. NDQuits provides free NRT in the form of nicotine gum, patches, or lozenges.

Report authors

This report was compiled by Professional Data Analysts (PDA).

PDA is a B-corporation contracted to conduct an external evaluation of the North Dakota Tobacco Prevention and Control Program (TPCP) activities, including NDQuits. PDA has been evaluating tobacco control efforts for over 20 years across the United States (U.S.).

Please [contact](#) Melissa Chapman Haynes, PhD, with questions about this report. Questions about NDQuits or the TPCP should be directed to [Neil Charvat](#), director, TPCP.

Want to learn more about tobacco control in North Dakota?

[+The State of Tobacco Control in ND: 2019-21](#)

Available at:
https://www.health.nd.gov/sites/www/files/documents/Files/HS/C/CHS/Tobacco/Reports/2019-2021_NDDoH_Synthesis_Report.pdf

Commercial tobacco and nicotine continue to harm North Dakotans

While the rate of cigarette smoking has declined over the past few decades across the U.S., **commercial tobacco** (tobacco not related to sacred or traditional uses which are a part of some American Indian / Alaska Native tribal traditions) and other forms of nicotine use continue to harm individual North Dakotans, their families and friends, and the economic interests of the state as a whole.

- Every year in North Dakota, **1,000 adults die** from smoking-related illnesses.*
- Smoking causes every household in North Dakota to **pay an additional \$724** in taxes every year, on average, whether anyone in the household smokes or not.**

* Centers for Disease Control and Prevention: <https://www.cdc.gov/tobacco/about/osh/state-fact-sheets/north-dakota/index.html>

** Campaign for Tobacco-Free Kids: https://www.tobaccofreekids.org/problem/toll-us/north_dakota

“There's never been a better time to quit smoking or quit vaping than right now.”

While it is always true that there is no time like the present, the COVID-19 pandemic has presented different reasons to quit using tobacco or vaping. As North Dakota Governor Doug Burgum said, “there's never been a better time to quit smoking or quit vaping than right now.”* That’s because **COVID-19 has been shown to hit smokers harder**.**

* Prairie Public News: <https://news.prairiepublic.org/post/calls-quit-smoking-and-vaping-during-pandemic-may-be-working>

** Centers for Disease Control and Prevention: <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html>

Some North Dakotans face extra burdens from tobacco and nicotine use

Due to targeting by the tobacco industry and other contextual factors including inequalities in other health outcomes, some population groups use tobacco at higher rates than the general population. NDQuits has designated these groups as **“priority populations”**:

- Smokeless tobacco users
- American Indian / Alaska Native (AI/AN) individuals
- Individuals with behavioral health conditions
- Lesbian, gay, bisexual, transgender, or queer (LGBTQ) individuals
- Young adults ages 18-24
- Individuals insured by North Dakota Medicaid
- Uninsured or underinsured individuals
- Pregnant individuals

While NDQuits is open to all residents of North Dakota, the intent is for individuals from these groups to be particularly well-served by the quitline, in terms of reach and quit rates.

Note that **these groups overlap with one another** in that one individual can certainly identify with more than one of these groups. See page 17 for more discussion of this overlap.

NDQuits reduces the harms of nicotine addiction by helping North Dakotans quit

NDQuits is North Dakota's **quitline**. Anyone in North Dakota can call NDQuits (1-800-QUIT-NOW) or sign up online to receive **free quit support**, including phone counseling; NRT (nicotine patches, gum, or lozenges); and other resources.

The U.S. Surgeon General reported, "Since the 1990s, a large body of clinical literature has **consistently demonstrated the effectiveness of tobacco quitlines**."^{**} For example:

- Participating in multiple sessions of phone counseling **makes you 1.4 times more likely to quit**
- Combining counseling with NRT (as you can in NDQuits) is the **"gold standard"** in smoking cessation

^{*} Office of the Surgeon General:

<https://www.hhs.gov/sites/default/files/2020-cessation-sgr-full-report.pdf>

Quitlines are a critical rural service

Tobacco use in North Dakota is higher in rural areas (26.8% of adults) compared to urban areas (24.1%).^{**}

For some rural residents, in-person services – such as tobacco cessation – can be challenging to access consistently. Therefore, states like North Dakota with significant rural populations (49.5% of the population),^{***} a quitline like **NDQuits is a critical way to access support via the phone** or internet.

^{**} This statistic represents current tobacco use (cigarettes, electronic cigarettes, and/or smokeless tobacco) based on 2018 BRFSS data.

^{***} U.S. Department of Agriculture: <https://data.ers.usda.gov/reports.aspx?StateFIPS=38&StateName=North%20Dakota&ID=17854>

Quitlines save money

An independent panel of public health experts looked systematically at research published about quitlines and found "the economic evidence indicates that **quitline services are cost-effective** across a range of different treatments and promotional approaches."^{****}

See page 9 for a cost-benefit analysis showing that **North Dakota saves \$2.28 - \$2.66 for every dollar spent** on NDQuits.

^{****} The Community Guide: <https://www.thecommunityguide.org/findings/tobacco-use-quitline-interventions>

NDQuits
1-800-QUIT-NOW (1-800-784-8669)
ndhealth.gov/ndquits

The network behind NDQuits

NDQuits is funded and overseen by the North Dakota Department of Health (**NDDoH**), namely the **TPCP**. The program is administered by National Jewish Health (**NJH**), with most quit coaches working under the University of North Dakota (**UND**) School of Medicine. The follow-up survey data included in this report were collected by the Wyoming Survey & Analysis Center (**WYSAC**).

Overall, **97% of referrals** to NDQuits come from TPCP-funded partners, mainly two initiatives:










- **NDQuits Cessation Grantees:** 17 organizations are providing face-to-face or telehealth support in quitting nicotine. Learn more [here](#).
- **Local Public Health Units:** Local public health units offer nicotine cessation support. Learn more [here](#).

Additionally, **broadcast media** (television and radio) is essential for driving North Dakotans to NDQuits and accounts for **22% of enrollees** (Phone & Web-Phone).

More about NDQuits' free services

NDQuits has three choices of the program: **Phone** services, **Web** services, or a combination of both (referred to as **Web-Phone** in this report and includes services from both programs).

NDQuits also offers a **program for youth** and **two special phone programs**: one for **American Indians** and one for **pregnant or postpartum** individuals. These optional programs offer more services than standard Phone and are specially tailored for the participating groups.

	 Phone	 Web
 Enrollment	<ul style="list-style-type: none"> Enroll by calling 1-800-QUIT-NOW Eligible to re-enroll every 60 days after last contact 	<ul style="list-style-type: none"> Enroll at ndhealth.gov/ndquits Lifetime enrollment
 Counseling calls	5+ calls with North Dakota quit coaches	 <i>Can be accessed by adding the Phone program</i>
 Web portal	 <i>Can be accessed by adding the Web program</i>	Online access to quit resources
 NRT benefits (nicotine replacement therapy)* <i>Individuals insured by North Dakota Medicaid may be eligible for additional NRT</i>	<i>If you do not have insurance or your insurance does not cover NRT:</i>	
	Up to eight weeks of patches, gum, or lozenges, or combination NRT (patches and gum or lozenges) twice a year	Up to eight weeks of patches, gum, or lozenges twice a year
 Available add-ons	<ul style="list-style-type: none"> Printed quit guide Emails Texts 	<ul style="list-style-type: none"> Online quit guide Emails Texts



The **American Indian Commercial Tobacco Program (AICTP)** and the **Pregnancy Postpartum Protocol (PPP)** each offer additional counseling calls with specially trained coaches and a tailored quit guide. Read more about these special programs on page 16.

Note for these programs, quit coaches may not be located in ND.



NDQuits also offers **My Life, My Quit**, a program specially tailored for youth under age 18 who want to quit.

NDQuits helps participants quit

Data in this section come from a follow-up survey NDQuits participants are asked to complete seven months after enrollment. The surveys in this report were conducted in July 2019 - June 2020 with people who enrolled in December 2018 - November 2019.



The follow-up survey results should be **viewed with some caution** because they include only people who responded to the survey: 27% of those contacted to participate (well below the NAQC goal of 50%). Past research has shown this could make quit rates appear higher. To help show this uncertainty, the graph below includes 95% confidence intervals; see more information in the Methods Appendix.

Among the 434 survey respondents who used tobacco when they enrolled in NDQuits and who received evidence-based service from the program (NRT or a counseling call):

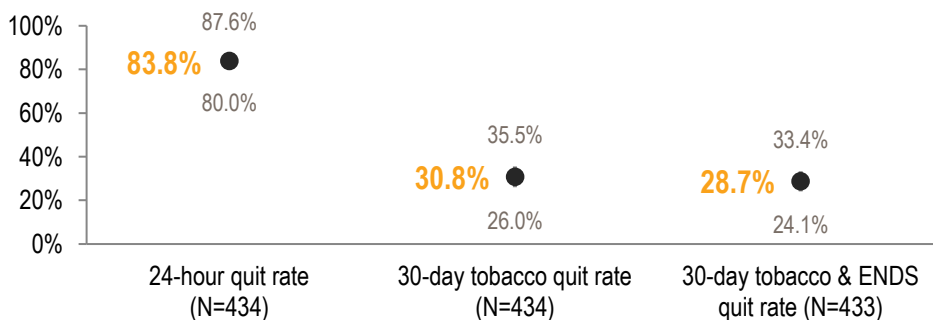


With NDQuits support, **84%** of survey respondents quit tobacco for at least a day.



Seven months after enrolling, **31%** of respondents had not used tobacco in a month.*

These quit rates meet (or very nearly meet) the NDQuits goals (and for 30-day quit rate, NAQC benchmark) of 85% and 30% respectively. A strength of NDQuits is **enrollees who get treatment go on to quit at standard rates.**



* 29% of respondents had not used tobacco or **ENDS** in the 30 days prior.

ENDS is another term for e-cigarettes or vaping devices. "ENDS" stands for "electronic nicotine delivery systems."



Quitting is a journey - and may take a number of attempts

According to the Centers for Disease Control and Prevention (CDC), in 2018, about half of adult cigarette smokers (21.5 million) attempted to quit, of whom about 2.9 million quit successfully for more than six months.**

Why the disconnect? Quitting is very challenging because nicotine is an addictive substance. However, an unsuccessful quit attempt is still a step closer to quitting. Even quitting for 24 hours - as most NDQuits participants did - is excellent practice for eventually quitting for good.

** Centers for Disease Control and Prevention:

https://www.cdc.gov/tobacco/data_statistics/fact_sheets/cessation/smoking-cessation-fast-facts/index.html

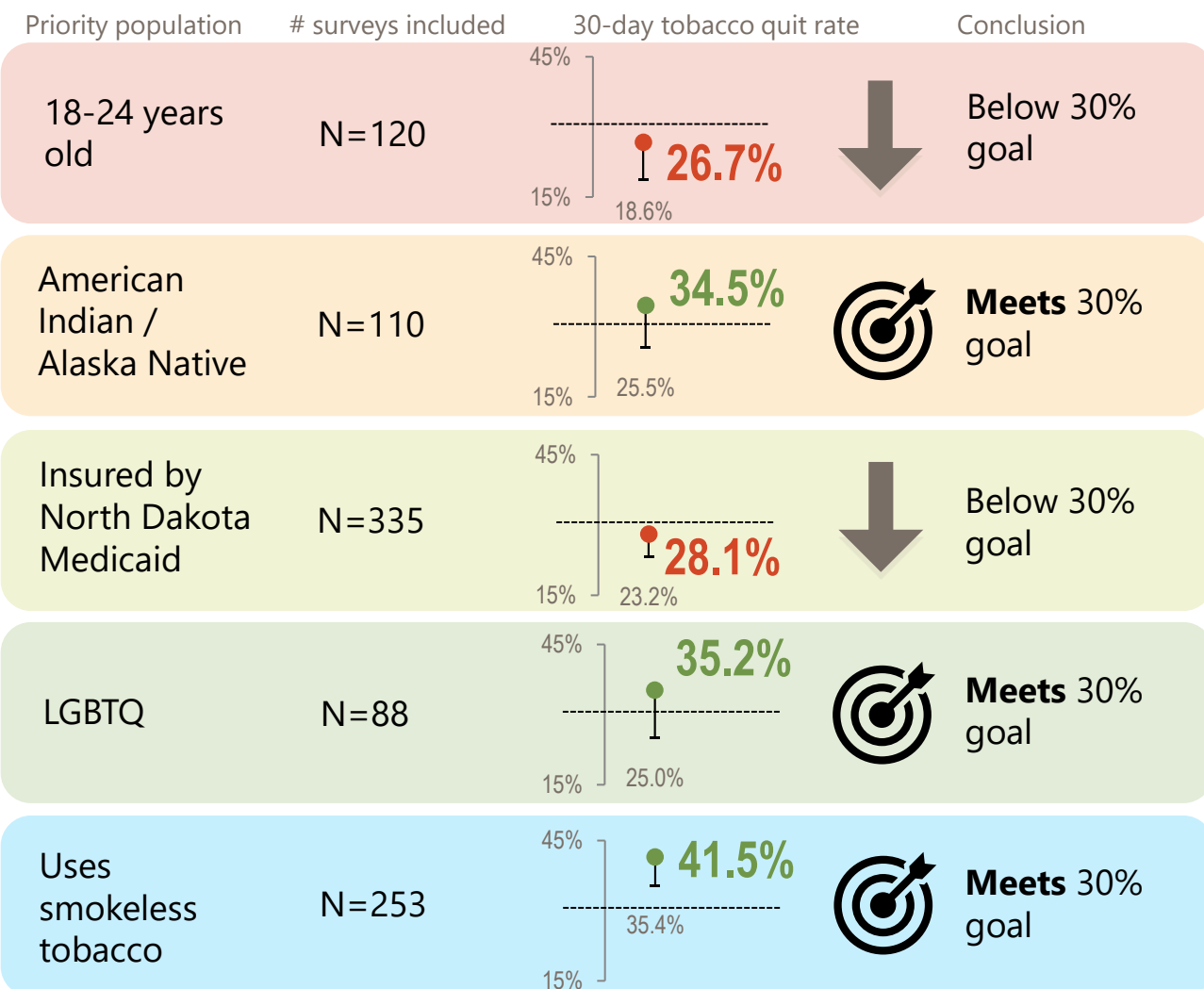
NDQuits appears to help individuals from priority populations quit at fairly strong rates

Analyzing quit rates for each priority population (as described on page 3) would be one way to assess how well NDQuits serves those groups, who typically face higher barriers to quitting than the general public. However, each year the number of survey respondents from each group is too small to calculate a statistically strong rate. For this analysis of 30-day tobacco quit rates, we combined survey respondents from each group from the past five years (FY16-FY20).



These rates should be **considered carefully** because the survey response rate for this period was very low at 26% (below NAQC's 50% recommendation), meaning the results likely have some bias and may be overestimated. For this reason, we only included the lower bound of the 95% confidence interval below. Additionally, there were likely program and contextual changes over these five years.

Because of the overlap between these populations (as noted on page 17), these rates **should not be compared to each other** but instead each compared to the 30% NAQC benchmark. This goal was met for three of the five priority populations for whom we were able to calculate a quit rate; this is a fairly positive finding with some room for improvement.



Hear what participants think

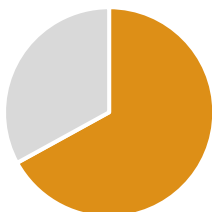


"I am satisfied because I quit. I am breathing better, and my life has changed."



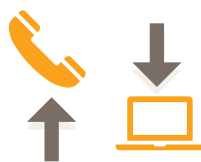
"It's still a work in progress with quitting, but it's nice to know I have resources to help me."

Most participants were satisfied with their NDQuits experience



67% of participants (out of 554) were "very" or "mostly" satisfied with NDQuits.

This falls short of the 80% goal. One way to work towards higher satisfaction would be to ensure more enrollees receive at least minimal treatment (see this further discussed on page 14), as participants who did showed a higher (73%) satisfaction rate.



By program, satisfaction was highest among Phone participants (at 73% satisfied) and lowest among Web (62% satisfied).



"If anyone wants to quit smoking, they should join!"

Among add-on services, the welcome guide was ranked most helpful

service	% reporting it was "very" or "mostly" helpful	
Welcome guide	61%	N=328
Texts	46%	N=311
Emails	42%	N=213



"My coach called and cheered me on. She gave me suggestions on how to keep my hands busy."



"I had enough patches to get me through to the quit stage! Very happy I didn't have to pay for this!"

Some participant comments show room for NDQuits to improve



"They gave you free gum and that is about it."



"I did not like being called every couple weeks, there were a lot of things going on in my life."

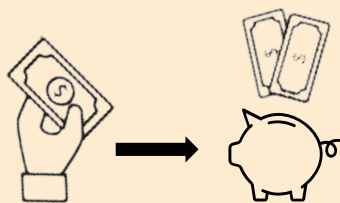


"When they asked for a time to call, I gave them a time, but they would often call a lot earlier... so I could not get back to them."



"It was a little tricky getting it signed up and going. I quit on my own after getting frustrated with the program."

NDQuits saves North Dakota money



For every \$1 spent on NDQuits, North Dakota saves \$2.28 - \$2.66*

** Under the current tax rate (\$0.44 per pack), though past analyses show the benefit continues to hold if taxes were raised.*

This is the third year that a cost-benefit lens has been used to analyze NDQuits. **Each year, NDQuits has been found to save more money than it costs.**

The major components of the cost-benefit calculation are shown in the table below. All dollar amounts have been adjusted for inflation to 2020 dollars.

While NDQuits saves the North Dakota government money, it is notable that the **savings dropped by about a dollar since FY19**, largely related to the smaller number of enrollees in NDQuits (see discussion of factors affecting enrollment on the next page).

Component	Conservative Quit Estimate** 23.0%	Quit Estimate** 27.2%
Benefits of cessation	\$2,848,212	\$3,368,320
Costs of cessation		
Cessation program	\$1,147,816	\$1,147,816
Lost tax revenue	\$99,199	\$117,314
Total cost of cessation	\$1,247,015	\$1,265,130
Benefit/Cost Ratio (dollars saved per dollar spent)	2.28	2.66

** 27.2% represents the quit rate among cigarette smokers who responded to the quit survey, while 23.0% represents a more conservative estimate, the lower bound of the 95% confidence interval around that quit rate.

Limitations of NDQuits cost-benefit analysis

While we are confident that the benefits of the NDQuits cessation program are more significant than the costs, there are some limitations to this analysis, including:

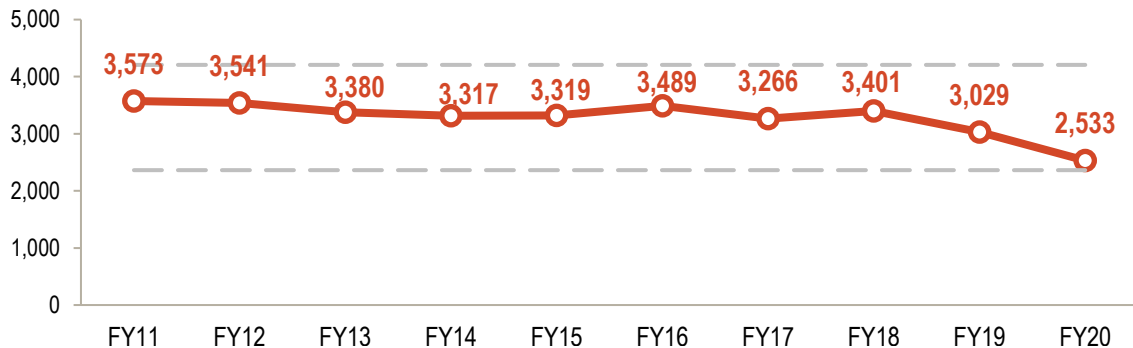
- This analysis is limited to cigarette smokers only, though other types of tobacco and nicotine are also known to be dangerous.
- The most recent healthcare expenditure data available and estimates of productivity losses are now outdated. Changes in healthcare costs, insurance coverage, and salary are all factors that will alter the cost of tobacco use.
- The estimate of NDQuits participants who stop smoking is likely inflated, given it is based on a survey with a response rate of 27% (well below the NAQC-recommended 50%) and that individuals who quit tobacco may be more likely to respond to the survey.
- The number of packs of cigarettes sold includes cross-border sales, meaning the number of packs per smoker in North Dakota is an overestimate.

See the full breakdown of this analysis in the Methods Appendix, on page 52.

Overall NDQuits enrollment has declined in recent years



In FY20, **2,533** unique participants enrolled in NDQuits, a **16.4% decrease** compared to the previous year (see chart below). **This is a sizeable decrease and should be a priority** for NDQuits partners to consider strategies, whether traditional or innovative, to counter. This number is within three standard deviations of the mean number of registrations since FY11 (indicated by the grey dashed lines below) but should continue to be monitored. This could be in part due to **national trends over the past five years** of decreases in calls to quitlines and enrollees receiving minimal treatment, though NDQuits is showing a steeper drop in recent years (National FY20 data not yet available).*

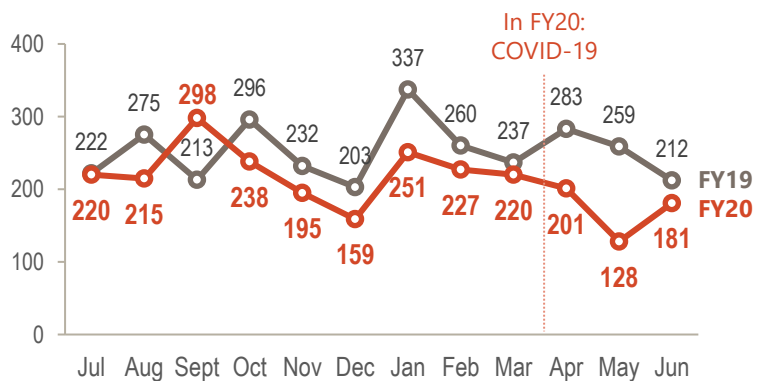


* North American Quitline Consortium (NAQC):

https://cdn.ymaws.com/www.naquitline.org/resource/resmgr/2019_survey/Nov3NAQC_FY2019_Annual_Surve.pdf

COVID-19 appears to be affecting NDQuits participants in a variety of ways

A number of factors affect enrollments into NDQuits, so while any effects of the COVID-19 pandemic cannot be exactly teased out, looking at unique monthly enrollments (see chart to the right) suggests that, compared to last year, the COVID-19 pandemic and ensuing societal changes may have **initially decreased enrollments but then led to more** enrollments.



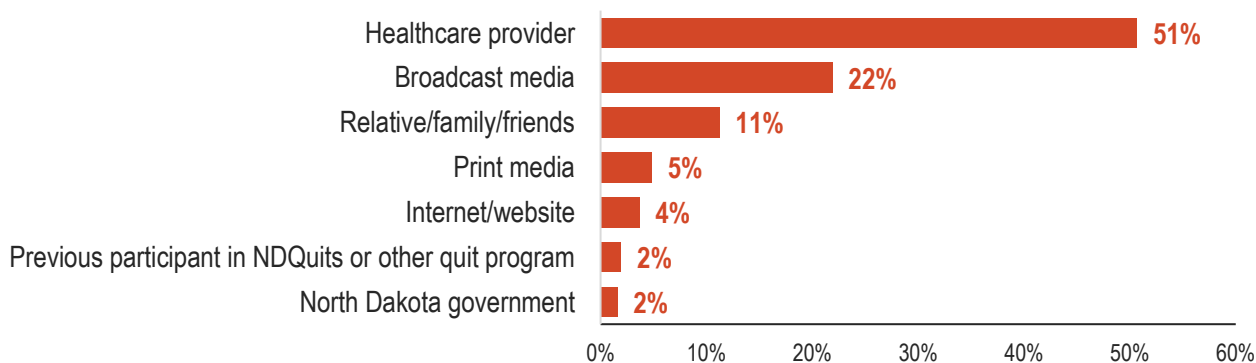
In an additional analysis, the 30-day tobacco quit rate (discussed on page 6) did not appear to differ in the period before the pandemic as opposed to after.

Furthermore, recent NDQuits follow-up survey responses (conducted September 2020 – January 2021), which include new questions about COVID-19 and nicotine use, show:

- **Some NDQuits participants report the COVID-19 pandemic made quitting or staying quit harder; others said it was easier; others said it did not affect them.**
- Respondents report that COVID-19 has impacted their quitting through **changes in routine** as well as the **worry and stress** caused by the pandemic.

Healthcare providers are bringing the most people to NDQuits, media another top source

Among Phone and Web-Phone participants, the most common source through which registrants report hearing about NDQuits is from their **healthcare provider**, with **broadcast media** the second most common. Other top sources are listed in the chart below.



Less common responses were not included above but showcase how various partnership and outreach efforts can together propel more individuals to NDQuits: these included billboard/bus bench, insurance, employer, other partner or social service organizations, and housing authorities.

Research and past trends suggest more media would bring in more enrollments

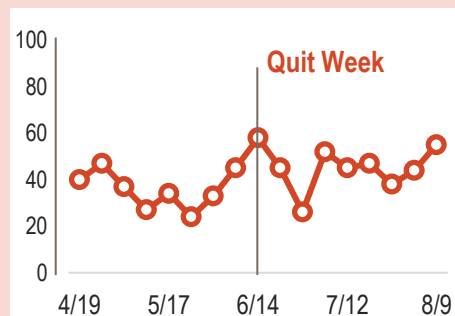
Using health communications to promote NDQuits as a resource for North Dakotans ready to quit is an evidence-based practice and a key component of comprehensive tobacco control. Research supports such media efforts, specifically via broadcast media (television and radio), are **related to increased use of the quitline and, ultimately, quit attempts**.*

In North Dakota specifically, a recent media evaluation that spanned 2013 - 2020 found that NDQuits weekly media investment is positively associated with incoming calls. **When NDQuits advertisements are running on television and radio, there is a net gain of 15 calls to the quitline each week**. Thus, more investment in broadcast media could pay off by increasing enrollments.

* See for example: County Health Rankings: <https://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/strategies/mass-media-campaigns-against-tobacco-use>

Quit Week




June 15-21, 2020, local public health units and other North Dakota partners worked together to raise awareness about the harms of tobacco use and promote quitting. As shown in the chart of weekly enrollments around this period below, Quit Week seems to have been successful in increasing enrollments in NDQuits, suggesting similar activities in the future may help combat declining enrollments.



Referrals to NDQuits are working well

- **1,542** referrals were made to NDQuits, for 1,318 unique individuals.
- Among referrals made in the first 11 months of FY20 (to allow a month to enroll), **25%** of referred individuals went on to enroll in NDQuits. This is a **strong conversion rate**, similar to recent years.
- Almost all referrals (**97%**) came from other **entities funded by the NDDoH**, namely cessation programs and local public health units.

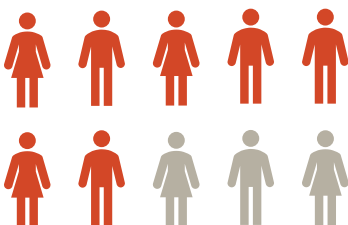
While fax referrals fell in popularity, they showed the highest conversion rate

Referral type	Proportion of referrals	
	FY19 (N=1,523)	FY20 (N=1,542)
 Fax	49%	↓ 22%
 e-Referral	45%	↑ 67%
 Provider web referral	6%	↑ 1%

This year, the **proportion of fax referrals continued to decrease** in favor of e-referrals. Notably, the conversion rate was the highest for fax referrals (30% compared to 23% for the other methods). It is worth considering how to maintain or even **strengthen conversion rates as more systems move towards e-referrals**.

Referrals connect individuals to treatment

7 in 10 participants who were referred by providers and registered for NDQuits received at least a phone call and/or NRT (74% of N=322). Delivery of evidence-based treatment to referrals is a success of the NDQuits referral process.



Referral tips for providers

- Set up a system to ask every patient about their tobacco and nicotine use
- Keep brochures or flyers promoting NDQuits around your office
- Use a nonjudgmental tone in discussing tobacco and nicotine use
- Recommend quitting, considering tying it to the reason for their visit
- Give any referred patient a sense of what they should expect in terms of being contacted
- Let patients who are not interested know that you are available to discuss if they become interested in the future
- Know that NDQuits is free for your patient!

Source: Medscape & CDC:
<https://www.medscape.com/viewarticle/776542>



NDQuits reached 1.16% of North Dakota tobacco users this year

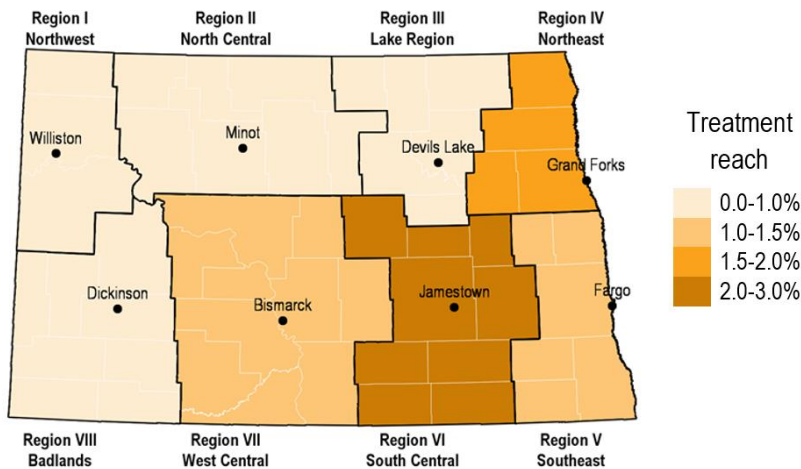
This is the program’s **treatment reach**, meaning the ratio of tobacco users who receive treatment from a state’s quitline to the number of tobacco users statewide. See more information about how treatment reach is calculated on page 43. The 95% confidence interval around this estimate was **1.08%-1.26%**.

This is **just below the average treatment reach reported by NAQC** for FY19: 1.19% across 48 quitlines.* It also represents a **decrease from last year’s 1.30%**.

Treatment reach among **smokeless tobacco users** was: **0.33%** (0.29% - 0.39%)

Treatment reach among **American Indian tobacco users** was: **0.97%** (0.78% - 1.30%)

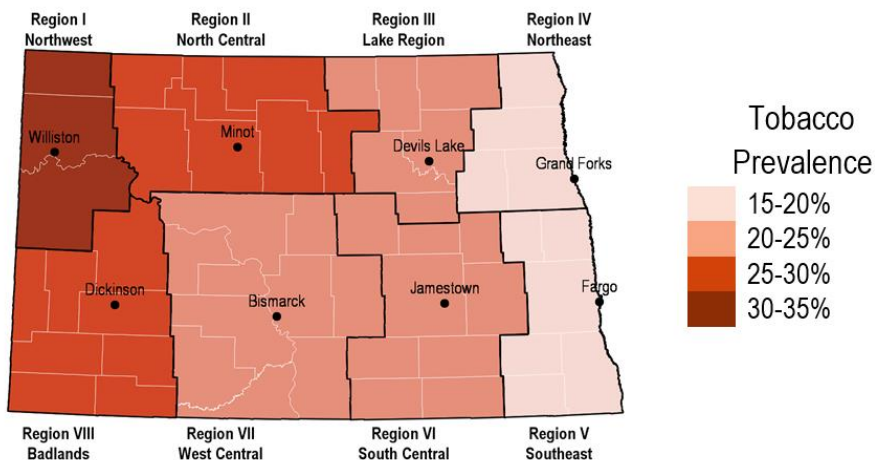
Treatment reach by Human Service Region



As seen in previous years, reach was generally highest in the **eastern and southern regions** of North Dakota. Also similar to past trends, **regions with the higher prevalence of tobacco use often had lower treatment reach rates**. It would be ideal for those regions to instead have similar or even higher rates of reach, to help combat the higher use.

There are various contextual factors to consider when analyzing these maps, including the distribution of rural and urban areas as well as of Tribal Nations. For example, areas with lower population density sometimes have lower levels of health services through which someone may be referred to NDQuits or counseled to quit tobacco or nicotine use in general.

Prevalence of tobacco use by Human Service Region



* North American Quitline Consortium:

https://cdn.ymaws.com/www.naquitline.org/resource/resmgr/2019_survey/Nov3NAQC_FY2019_Annual_Surve.pdf

NDQuits provides proven quit services, but some enrollees fall through the cracks

NAQC defines **minimal treatment** as receiving a counseling call or NRT, as both services have been proven to help people quit.

63% of NDQuits participants received this support. In comparison, in the last NAQC survey,* this was **82% across 49 quitlines**. By program, this rate was 50% for Web, 60% for Web-Phone, and 76% for Phone.



NDQuits should strive for anyone who seeks quitting support to receive it and therefore, to **increase this rate in the future**. Several different strategies could be pursued, including emphasizing the Phone program (given its highest rate) and encouraging NRT receipt, as well as carefully auditing systems to understand when and how people do not receive treatment.

* NAQC (320,985 unique tobacco users receiving evidence-based services / 389,950 unique tobacco users)
https://cdn.ymaws.com/www.naquitline.org/resource/resmgr/2019_survey/NAQC_FY2019_Annual_Survey_Da.pdf

A solid amount of phone counseling is provided to those who do receive it

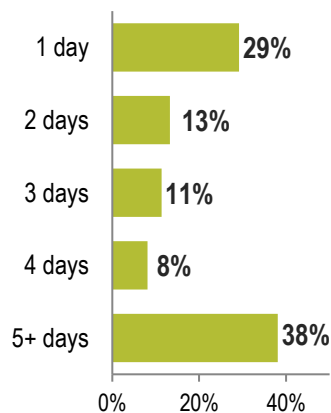


NDQuits participants in the general Phone or Web-Phone programs receive personalized support from counselors in North Dakota, employed by UND.

76% of Phone program participants receive at least one counseling call; the same is true of **57%** of Web-Phone participants.

Among the 1,024 participants who received a call on at least one day, on average **3.7 days** of counseling were received (see distribution to right). While this average may not** reach the full 5+ calls promised by the program, it is an impactful amount of support.

** Note that data is only available about number of days of counseling, not number of calls; however, having more than one counseling call on a given day is relatively rare.



Other supports are used at lower rates



35% of Web or Web-Phone enrollees logged in to the **web portal** after signing up***



63% of Phone or Web-Phone enrollees received at least one **text message**

*** For this year's analysis, PDA incorporated new information from NJH about which parts of web portal use happen during enrollment as opposed to after. The new update more accurately reflects activity occurring after signing up. Using the older method to see how this year compares to earlier reports, this figure would have been 83%.

Nicotine Replacement Therapy (NRT) is a key NDQuits benefit, proven to assist quitters; NDQuits could consider providing more of it.

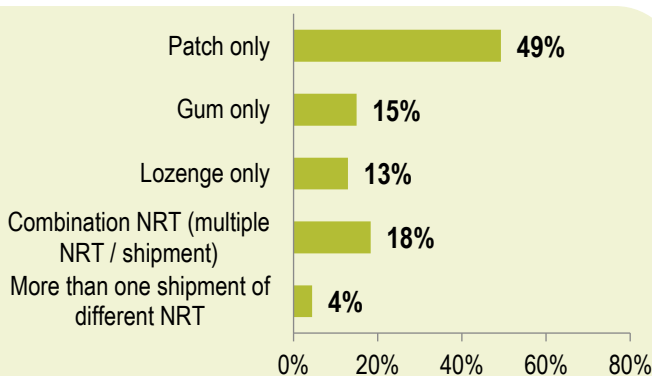
53% of NDQuits participants received NRT from the program, very similar to previous years.

This is **lower than rates observed in other states**, as suggested by NDQuits' overall minimal treatment rate falling below the rate reported across all NAQC survey respondents (see page 14). North Dakota's lower rate is likely due at least in part to narrower eligibility criteria than other states; this should be investigated further to ensure there are not other barriers to accessing NRT.

This also falls below the **71%** of survey respondents (N=554) reporting they *expected* to receive free NRT from NDQuits. One-third of respondents who expected free NRT did not go on to receive it, which could have presented a challenge in quitting as well as reduced their satisfaction with the program.

Among participants receiving NRT, **receiving patches alone** was most common (49%).

Just **18% received more intensive "combination NRT,"** meaning patches with gum or lozenge (not available to Web participants). This is an increase over last year's 13%. Further provision of combination NRT could be worthwhile.



While **providing more NRT or more combination NRT** would cost more, it could potentially also help more NDQuits participants quit.

Survey respondents report barriers to NDQuits NRT, some use of external NRT

81% of survey respondents reported using at least one type of cessation medication.

Given how helpful NRT is to quitting, this is a positive finding. As noted in the Outcomes section, results from the survey should be viewed with some caution given the respondents may not represent all NDQuits participants. This also reveals that some participants not provided NRT by NDQuits **will seek and access it themselves**, which adds some nuance to the recommendation to consider expanding provision.

Among respondents who received NRT from the program, about a quarter (**24%**) rated the process as something **less than "very easy."** Notably, this does not include participants who may have wanted NRT but were not able to access it. Hence, it is worth carefully assessing the processes for accessing NRT through NDQuits and how they are presented to participants. For example, **10%** of those not receiving NRT reported they **could not figure out how to order it** on the Web program, while **23%** reported the issue is that they **were never sent NRT**: suggesting they expected to get it without further action on their part.



Tailored NDQuits programs provide good service to small numbers

My Life My Quit (for teens)

NDQuits offers a program called My Life, My Quit that is tailored for teens. Individuals 18 and younger can sign up to get support in quitting vaping and/or any type of tobacco. This year, **23** North Dakota youth enrolled.



Given that in a 2019 statewide survey, **33%** of youth reported vaping in the last 30 days (a sharp increase from **21%** in 2017)*, getting more teens to enroll should be a priority; this work could involve targeted media, community outreach, and more.

* BreatheND: <https://www.breathend.com/hot-topics/vaping/>



American Indian Commercial Tobacco Program (AICTP)

This year, 179 NDQuits participants identified as American Indian / Alaska Native. Each of these individuals was eligible for the AICTP Phone program, which features American Indian coaches with an understanding of the difference between sacred and commercial tobacco and other cultural context. Extra counseling calls are also offered.

Among the 179 eligible individuals, **22% (39) chose to enroll** in the AICTP.

Service delivery was high among AICTP enrollees, with 95% receiving one or more days of counseling and 66% receiving NRT. **Both of these rates are higher than for NDQuits overall.** This success suggests that further promoting this unique program would be worthwhile.



Pregnancy Postpartum Protocol (PPP)

Sixty individuals were pregnant at the time of registration and thus eligible for the PPP. Of those, **60% (36) chose to register.**

75% of PPP enrollees received a **counseling call**, similar to the general Phone rate.

The PPP also offers **incentives for completing calls** - \$5 for each of the first five calls (prenatal) and \$10 for each of the following four calls (postpartum). Among individuals who received any calls, the estimated median incentive payout was **\$10**. See more information on page 30.

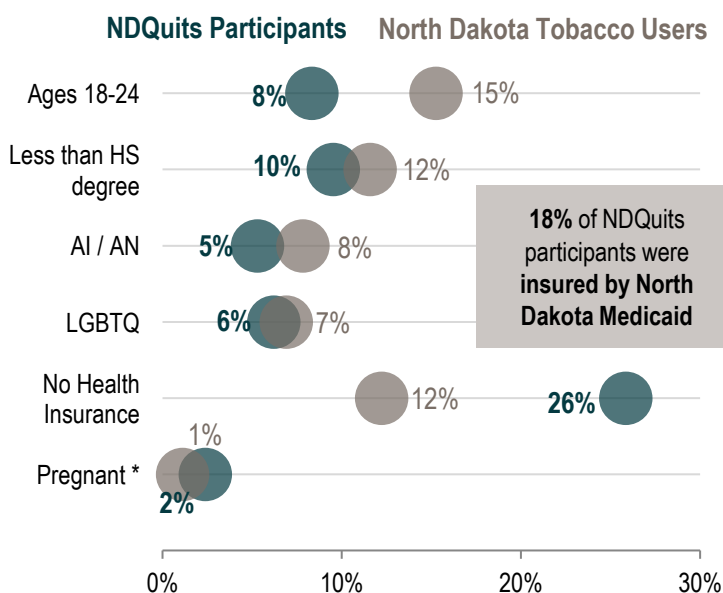
Given that another cessation program for pregnant tobacco users, BABY & ME – Tobacco Free Program, is ending, more pregnant individuals may be directed to the PPP. Strategies to promote counseling call completion should be explored.

This year, **seven** NDQuits participants identified as American Indian / Alaska Native and were pregnant, and thus were eligible for both special protocols. While this is a small group, such intersections between priority groups are important to consider: see page 17 for more information.

Some priority populations were underrepresented among NDQuits participants

As introduced on page 3, NDQuits intends to address disparities in tobacco use by providing services to certain priority populations. As the chart on the right shows, **several of these populations are represented at slightly lower rates among NDQuits participants** than they are among North Dakota tobacco users overall.

For example, the chart shows that 18-24 year olds make up 15% of North Dakota tobacco users, but just 8% of NDQuits participants. Ideally, this number would be 15% or even higher, which would indicate NDQuits was reaching this group at the level they exist in the population. See more comparisons in the Table Appendix.



18% of NDQuits participants were insured by North Dakota Medicaid

Notes: Statewide data is from the BRFSS, with the exception of LGBTQ (from the ATS). Comparable Medicaid data is not available statewide.
 * The statistic used here for pregnancy is an estimate with some limitations, see the Table Appendix for more details.

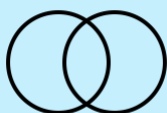
Many NDQuits participants belong to more than one priority population

58% of NDQuits participants are identified as belonging to at least one **priority population**, groups that are disproportionately at risk for tobacco use and often face barriers to quitting.

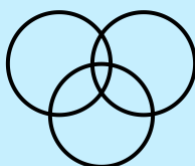
These populations **do not exist in isolation**. Instead, an intersectional framework should be used to think about how these identities overlap. Looking at how many NDQuits participants belong to more than one priority population is an initial step in this sort of analysis.

Among the **1,461** NDQuits participants belonging to at least one priority population:

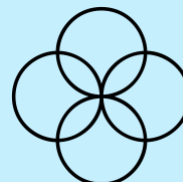
28% belonged to **two**



6% belonged to **three**



1% belonged to **four**



One example finding is a higher proportion of participants with North Dakota Medicaid among pregnant participants and among participants who identify as American Indian or Alaska Native. See detail on the size of overlaps between populations on page 32.

The priority population characteristics included here were American Indian / Alaska Native, LGBTQ, having a behavioral health condition, being pregnant, being age 18-24, and being insured by North Dakota Medicaid. For this analysis, missing data on a question was counted as not belonging to that population.

NDQuits success in other languages



NDQuits provides counseling in over 200 languages. English, Spanish, and Arabic are spoken by quit coaches, and the other languages offered by phone interpretation.

Among the 16,000+ NDQuits enrollments over the past five years (FY16-FY20), more than **99% were by English speakers**. Among the 104 enrollments with a different preferred language:

- Enrolling by **Phone** was more common than by Web;
- 53 preferred to receive services in **Spanish**, 20 in **Nepali**, and between two to seven for each of **Arabic, Bosnian, Somali, Mandarin, and Visayan**, with an additional nine languages each reported by one enrollment;
- **Non-English speakers received counseling and NRT at fairly similar rates to English speakers**, which is a success given that logistical barriers can lead to other programs underserving this population;
- A future consideration would be how to **serve more people speaking languages other than English**: this may involve conducting promotional or media activity in other languages and/or that features the languages available for NDQuits.




More detail about NDQuits participants is available in the Appendix

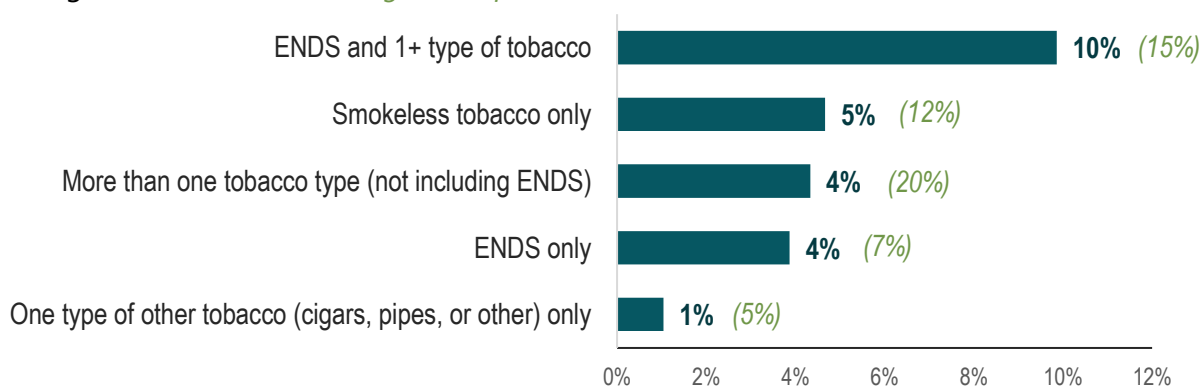
See the **Table Appendix** to see tables of demographics and tobacco use characteristics by NDQuits program and compared to statewide and comparing this year to last year. More notable differences are described below.

- **Younger** NDQuits participants are more likely to use the Web program; Web participants also generally show **higher levels of education** than Phone or Web-Phone participants.
- Comparing this year's participants to last year's, overall, the groups showed **similar demographic breakdowns**, besides this year showing a smaller number of enrollments (see page 10). Notable changes are that this year's participants included:
 - fewer uninsured participants, with more Medicare participants, and
 - more ENDS users, including ENDS-only users.
- Compared to North Dakota tobacco users (based on data gathered in the BRFSS or ATS surveys), NDQuits users are **more likely to be female, older, and have lower levels of education**. They are also **less likely to have insurance**.

NDQuits serves all North Dakotans using any type of nicotine, including cigarettes, smokeless tobacco, ENDS, and others

 76% of NDQuits participants used cigarettes only. (among adult ND tobacco users, this was 41%)

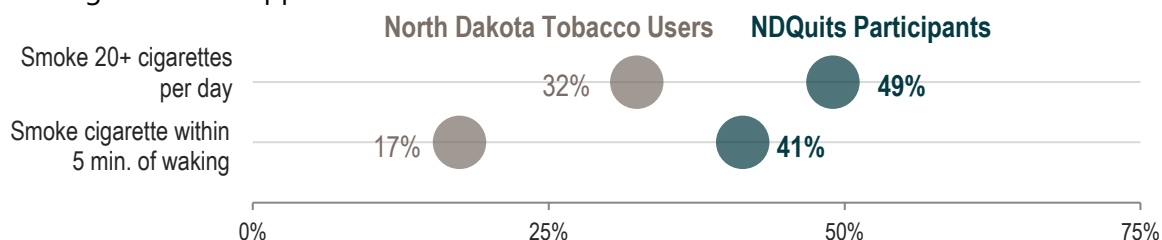
People using other tobacco or nicotine can also use NDQuits, including people using smokeless tobacco, ENDS, other tobacco, or any combination of these. Below you can see the breakdown of **other patterns of tobacco use among NDQuits** participants, with the comparable statewide rate among adult tobacco users *in green in parentheses*.



NDQuits well-serves highly addicted cigarette users but could better reach other groups

Overall, we **see NDQuits very heavily serves cigarette-only North Dakotans**. In contrast, NDQuits participants show less use of smokeless tobacco, ENDS, other types of tobacco, and multiple types of tobacco than does the state overall. To some extent, this could be a data collection issue if NDQuits is less thoroughly asking about tobacco types than the statewide survey referenced here; on the other hand, this could show NDQuits attracts cigarette users more than users of other products. These possibilities should be investigated, and NDQuits should also **ensure its materials reference all types of tobacco** rather than just “smoking” or “cigarettes.” There are also other potential reasons for this difference, such as if cigarette users may be more motivated to engage in cessation programming than these different groups.

Compared to all tobacco users in North Dakota, **participants in NDQuits show higher levels of cigarette addiction**, as shown in the chart below (for example, among all tobacco users in North Dakota, 32% smoke 20+ cigarettes a day, whereas this is true for 49% of NDQuits participants). This indicates that NDQuits is successfully reaching a population that struggles with quitting and has a high need of support.



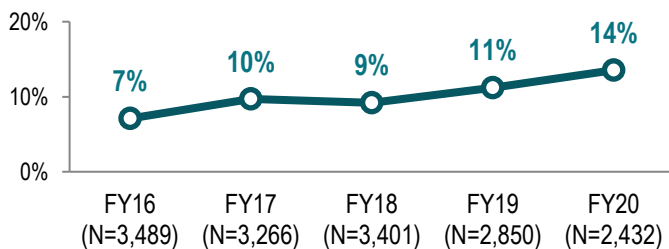
ENDS continue to gain popularity among NDQuits participants

“ENDS” refers to electronic nicotine delivery systems, also known as e-cigarettes, vapes, or vaping devices. Common brands include JUUL, PuffBar, and blu.



The NDDoH does not support use of ENDS as a cessation tool.*
ENDS users are encouraged to seek cessation support from NDQuits.

*https://www.health.nd.gov/sites/www/files/documents/Files/HSC/CHS/Tobacco/ENDS_Position_Statement.pdf



ENDS use data has been consistently collected among NDQuits participants for the past five years. We have seen the reported use of ENDS at intake increase every year, to **14%** of NDQuits participants this year.

ENDS use was particularly high among **Web** enrollees, **American Indian / Alaska Native** participants, **LGBTQ** participants, participants using **more than one tobacco type** (besides ENDS), and **younger** participants.



Among 201 enrollees in the age range **18-24 years old**, **47% reported current ENDS use** at intake.

Looking at follow-up survey respondents from this period, we see that 77% did not report ENDS use at intake or follow-up, while the remaining participants split into three similarly-sized groups: 8% who used ENDS at intake but not follow-up, 7% who used ENDS at follow-up but not intake, and 8% who used ENDS at both time periods. This suggests **experimenting with ENDS use** may be relatively common among NDQuits participants.

NDQuits survey respondents use ENDS to attempt to quit tobacco, without success

Of the respondents reporting ENDS use at follow-up (15% of all respondents), **86% reported using ENDS to help them quit using tobacco**. The same percentage reported the reason was to reduce use (86%); these were the two most common reasons.

Despite this intent and that ENDS vendors often advertise ENDS as cessation products, **NDQuits participants who use ENDS are not showing successful tobacco cessation**.



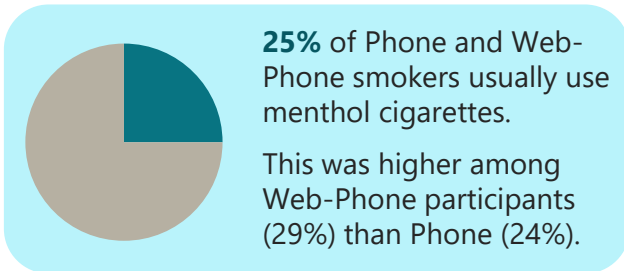
Nearly seven of ten (69%) ENDS users at follow-up reported using at least one other form of tobacco in the past 30 days, meaning they had not successfully quit and were instead using **both ENDS and other tobacco**.

NDQuits should continue to emphasize that ENDS are not a recommended cessation device and put even more effort into assisting participants with quitting ENDS, whether they are using ENDS only or alongside other tobacco.

Menthol cigarettes pose another challenge to North Dakota smokers

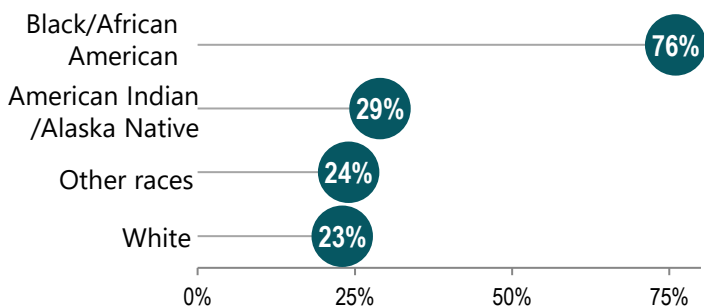
In 2014-15, 32.5% of current cigarette users in the U.S. reported that **menthol was their usual type of cigarette**. Menthol cigarette use was seen to be **higher among female, Black, and Hispanic smokers**, as well as among smokers **under 35 years of age**.^{*} Menthol cigarette use also tends to be prevalent among **LGBTQ smokers and smokers with behavioral health conditions**.^{**} Research has also found that menthol smokers have **higher nicotine dependence and more difficulty quitting**.^{***}

Cigarette users registering for NDQuits Phone or Web-Phone programs are asked if they usually smoke menthol cigarettes, which have a minty flavor. This is the first NDQuits report including a deeper dive into this topic because, as noted it, affects already-vulnerable groups and poses an extra challenge for quitting.



Menthol use among NDQuits participants appears to follow these alarming trends

Use is higher among groups of color, particularly Black / African American enrollees

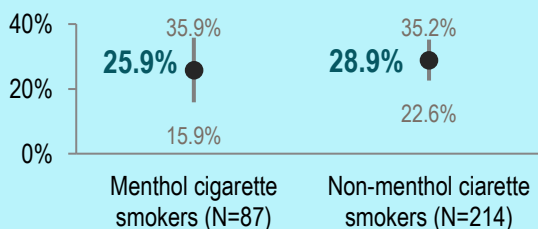


Use was also higher among the following groups:

- 45% of 18–24-year-olds
- 44% of pregnant participants
- 38% of Hispanic/Latino participants
- 37% of those also using ENDS
- 32% of LGBTQ participants
- 29% of female participants
- 26% of participants with a behavioral health condition

The quit rate among menthol smokers is slightly lower than among other smokers. This suggests that it may be worthwhile to pay extra attention to menthol users, including offering tailored support. Asking Web users about their menthol use may be a step to gain additional useful information.

30-day abstinence rates (tobacco only)



^{*} National Cancer Institute: https://cancercontrol.cancer.gov/sites/default/files/2020-06/tus-cps_2014-15_summarydocument.pdf

^{**} Truth Initiative: <https://truthinitiative.org/sites/default/files/media/files/2019/03/truth-initiative-menthol-fact-sheet-dec2018.pdf>

^{***} Food and Drug Administration: <https://www.fda.gov/media/86497/download>

Conclusions & program recommendations



NDQuits **provides an essential public health service** that helps North Dakotans quit and improves the health and vitality of the state overall. **Strengths of NDQuits include:**

- Meeting national **quit rate** benchmarks;
- Successfully **reaching more heavily addicted** cigarette smokers;
- **Good connections** to other programs in the state, as seen in the robust referral system;
- Providing **cost savings** to North Dakota overall; and,
- Being **set up to scale** to more enrollments easily, including in tailored programs.



Based on the results in this report, **critical areas for NDQuits improvement include:**

- **Increasing enrollments:**
 - Potential strategies to pursue based on research and past trends include: investment in **cessation media** (mainly broadcast), partner events like **Quit Week**, and outreach to less traditional referral partners.
 - Updating the **data collection of how individuals heard about NDQuits** may help identify trends and thus promising areas to explore to increase the use of NDQuits.
 - Enrollments in the tailored **special protocols** for youth and young adults, pregnant/postpartum, and American Indian participants should be encouraged in particular.
- **Providing services (including NRT) to a higher proportion** of enrollees:
 - With the aim of increasing the rate of enrollees receiving evidence-based service, the **system for counseling calls** should be assessed to identify gaps, if any.
 - The NRT distribution system should be reviewed, including considering **updates to eligibility criteria for NRT** or combination NRT, and ensuring a **straightforward ordering process**.



This report also identified some areas for future exploration and monitoring. **Topics to watch for NDQuits include:**

- Trends in types of **nicotine used among enrollees** and how these compare to statewide, such as:
 - Building on this analysis of **menthol cigarette** use among enrollees to consider if there are ways to serve menthol users better; and
 - Ensuring that NDQuits materials and media are explicit about serving users of **any nicotine type/s** and do not overly focus on cigarette smokers; as well as
- Building a deeper understanding of how **intersectionality among priority population characteristics** may affect NDQuits participants or North Dakotans in general.

Note: Starting in next year's report, results from the follow-up survey feature a response rate near or above 50%, and thus, represent more NDQuits participants, which will be useful for monitoring the program and considering future steps.