# Project Filter
# 2021 Outcomes Report

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# Executive Summary

During calendar year 2020, Project Filter offered a comprehensive commercial tobacco cessation program with phone-based coaching and a web-based interactive cessation resource, both operated by National Jewish Health, to provide support for Idahoans who want to quit using tobacco. National Jewish Health conducted an evaluation of the program by surveying participants six months after enrollment.

All participants who completed an intake in calendar year 2020 and agreed to follow-up, regardless of their readiness to quit, were eligible for inclusion in the evaluation survey pool. Participants enrolled in the phone program were surveyed via phone, with up to seven phone outreach attempts conducted for each participant throughout the survey period at different times to maximize response. Web-only participants were emailed an invitation to complete the evaluation survey, with up to two reminder emails.

A total of 1,656 phone program individuals consented to a follow-up survey, and 398 completed the survey for a 24% response rate.

1,278 web-only program participants consented to a follow-up survey, and 58 completed the survey for a 5% response rate. The response rate for web-only participants is extremely low and the results should be interpreted with an abundance of caution.

Key highlights from the evaluation include:

- Overall, 30% of Idaho Quitline (IDQL) program participants quit using tobacco.
    - Among participants who engaged in the phone program and completed at least 1 coaching call, 31% quit.
    - Among participants who engaged in the phone program and completed at least 3 coaching calls, 39% quit.
    - Among participants who engaged in the web-only program, 28% quit.
- On average, the IDQL program spent $183.47 per successful quit for web-only participants, and $622.60 per successful quit for phone-based participants. For comparison, the average cost to treat a single heart attack or stroke, events caused by smoking, is more than $11,000, highlighting the potential cost-effectiveness of the IDQL.

# Idaho Quitline Program

The Idaho Quitline (IDQL) program provides free cessation support to residents trying to stop using commercial tobacco. The Quitline offers support through phone coaching, an eHealth suite of services that includes an interactive web program, text and email, and by providing FDA-approved cessation medications. Individuals may enroll in services by:

- Calling 1-800-QUIT-NOW or 1-855-DEJELO-YA;
- Completing an enrollment form using the web portal; or
- During a Quitline outreach call following a fax referral, web referral, or eReferral made by the individual's healthcare provider.

The Quitline also recognizes that some populations require unique support to stop using commercial tobacco. To meet this need, we offer tailored phone programs for pregnant and postpartum women, American Indians, youth, and people living with behavioral health conditions. To support individuals for whom English is a second language, the Quitline offers telephone coaching, print materials, and a website in Spanish. The Quitline also partners with LanguageLine services to provide real-time translation in more than 200 additional languages.

National Jewish Health, the largest nonprofit provider of telephone cessation services, operates the Idaho Quitline program. As a founding member of the North American Quitline Consortium (NAQC), we follow NAQC guidelines for operating and evaluating the Quitline.

## Phone Program

The phone program provides coaching to any Idaho resident who is 13 years of age or older, and is contemplating a quit attempt or actively trying to quit. Coaching covers a variety of topics integral to quitting (i.e., strategies to increase motivation to quit, setting a quit date, and managing triggers) and provides interpersonal support to help participants maintain their quit and live a life free of commercial tobacco. Participants enrolled in the phone program coaching are eligible to receive up to five proactive calls from the Quitline and information tailored to their unique medical or demographic characteristics. Idaho residents seeking support can receive coaching over multiple quit attempts each year, if needed.

## eHealth Programs (Web, Text, Email)

Participants may also choose eHealth programs to enhance the support they receive during their quit attempt. The eHealth programs include:

- Opt-in motivational text and email messages; and
- An interactive web program (idaho.quitlogix.org) available 24/7 that provides:
    - Information about quitting;
    - Interactive cost-saving calculators;
    - Ability to design a quit plan tailored to the participants needs;
    - Engagement with a community of other people trying to quit;
    - Ability to track quit medication shipments; and
    - Ability to connect with a coach through web chat for an eCoaching session.

In this report, “web program participants” refers to those who only enrolled on the website and did not participate in the phone program.

## Quit Medications

All Idahoans age 18 years or older who are enrolled in the phone program and are trying to quit commercial tobacco can receive up to eight weeks of nicotine replacement therapy, including nicotine patches, gum, lozenges, and combination therapy. Idahoans enrolling in web program can receive up to six weeks of medication support.

## Special Population Programs

The Quitline offers four tailored programs for special populations designed to provide support and coaching to help navigate unique factors and life experiences that individuals may face when quitting commercial tobacco.

### Pregnancy and Postpartum Program (PPP)

Pregnant participants often find quitting during pregnancy easier than maintaining their quit following the birth of their child (the postpartum time period). The PPP provides extended support to help pregnant women successfully quit commercial tobacco during their pregnancy and maintain their quit postpartum. The program is available to participants who begin phone coaching during pregnancy. In addition to the standard quit medications available to all participants, PPP participants may receive up to five coaching calls during pregnancy and an additional four calls following their due date. A $5 incentive is provided for each of the five pregnancy calls and $10 for each of the four postpartum calls. The PPP uses a dedicated Coach model which strives to match the same female Coach with a single participant throughout their time in the program.

## American Indian Commercial Tobacco Program (AICTP)

Traditional tobacco has a cultural, sacred, and ceremonial role for many American Indians. The AICTP supports American Indian participants in quitting commercial tobacco by providing a culturally tailored intake and coaching process with up to 10 coaching calls and additional outreach attempts. The program is staffed by Coaches with lived experience in American Indian communities and who are specially trained to provide culturally sensitive services to this population. A dedicated toll-free number (855-5AI-QUIT) and website (AIQuitline.com) enable direct access to the program.

## Youth program: My Life, My Quit™ (MLMQ)

The My Life, My Quit™ program supports youth participants (under 18 years old at time of intake) to quit using commercial tobacco, with a particular focus on addressing use of e-cigarettes and nicotine vaping products. Youth seeking assistance can enroll online via a youth-tailored website (MyLifeMyQuit.com), or by calling or texting a toll-free number (855-891-9989). Beginning December 2020, a new short code (36072) enrollment option was added to enable seamless text messaging services. Youth participants are eligible to engage in coaching by phone, online chat or live text coaching (two-way text coaching as recommended by NAQC). All Coaches engaging with youth participants are specially selected and trained based on their ability to create a rapport with younger commercial tobacco users. Most youth participants enroll in the web or text programs only.  A separate evaluation report for My Life, My Quit™ was completed in 2021 and shared with Idaho's Tobacco Prevention and Control program.

## Behavioral Health Program

People living with a behavioral health condition and who use commercial tobacco products have a harder time quitting and maintaining their quit compared to commercial tobacco users who do not live with a behavioral health condition. The Behavioral Health program, launched in July 2020, is tailored to provide additional support by offering participants up to seven coaching calls, including a preparation coaching call and two check-in calls a month apart at the end of the program, as well as guidance tailored to support a person trying to quit based on the behavioral health conditions they live with. Based on participant feedback the behavioral health program is testing additional outreach strategies, including supplemental activities workbooks, specialized text messaging, and providing information on local resources that support behavioral health. These efforts are currently under evaluation and National Jewish Health anticipates the results will be shared in Spring 2022.

# Tobacco Cessation Rates

The following section describes quit rates for survey respondents based on their program enrollment type, commercial tobacco use patterns, demographics, and behavioral and medical health conditions. Throughout this evaluation report, quitting is defined as self-reported abstinence from commercial tobacco for the past 30 days from when the evaluation survey was conducted (six-months post intake). Commercial tobacco use includes any form of conventional tobacco (cigarettes, cigars, pipes, and smokeless) and electronic nicotine delivery systems (ENDS). Quit rates were calculated based on the proportion of evaluation survey respondents who reported not using any commercial tobacco in the past 30 days. NAQC recommends that Quitlines should attempt to complete at least 400 responder surveys per year and strive for a 50% response rate[1] to increase precision in the estimates of quit rates. Idaho completed 398 responder surveys for phone program participants resulting in a 24% response rate, and 58 responder surveys for web-only program participants resulting in a 5% response rate.

National Jewish Health and NAQC do not consider a respondent using ENDS, such as e-cigarettes, vape pens, or JUUL, as being free from commercial tobacco for several reasons. First, ENDS are considered commercial tobacco products by the Food and Drug Administration (FDA) and are not approved for cessation. Additionally, observational research shows that most people who use ENDS continue to smoke simultaneously or return to conventional tobacco products exclusively. At National Jewish Health, we offer personalized cessation support to individuals who wish to quit using any type of commercial tobacco product – ENDS and conventional tobacco.

For 2020 the overall responder quit rate for phone program participants using conventional tobacco alone was 34.7% (95% confidence interval = 30.2% - 39.5%), while the overall responder quit rate for phone program participants using any commercial tobacco product (conventional tobacco or ENDS) was 30.4% (95% confidence interval = 26.1% - 35.1%). The overall responder quit rate for any commercial tobacco product is slightly lower than the quit rate from 2019 (31.3%) and may be related to or influenced by the coronavirus pandemic and its negative impact on the mental health and wellbeing of individuals. National Jewish Health continues to monitor the impact of COVID-19 on use of and quitting commercial tobacco.

Given the response rate for the evaluation of web-only program was 5%, caution should be used when interpreting the results. For web-only program participants, the overall responder quit rate for conventional tobacco only was 37.9% (95% confidence interval = 26.6% - 50.8%) and the responder quit rate for any commercial tobacco product was 32.8% (95% confidence

[1] NAQC Issue Paper, Calculating Quit Rate, 2015 Update
https://cdn.ymaws.com/www.naQuitline.org/resource/resmgr/Issue_Papers/WhitePaper2015QRUpdate.pdf

interval = 22.1% - 45.6%). While the quit rate for 2020 is higher compared to 2019 (28.5%), the low response rate for 2020 resulted in a wide confidence interval for the web-only program.

In the following tables, “Participants” refers to the overall survey sample, “Survey Respondents” refers to the number of completed surveys, and “Quit” refers to the number of participants that reported having quit, based on the criteria described above. Where the number of respondents in a category was fewer than five persons, we did not include the results.

# Quit Rate by Program Offering

In this section, the proportion of respondents reporting having quit using tobacco are described by:

- Insurance
- Quit medication offering
- Referral type
- Text program participation
- Number of coaching calls received

## Overall Quit Rate by Insurance

Quit rates by insurance status ranged from a low of 24% for uninsured participants to 31% for participants with an “other insurance” status. Idaho may want to consider expanding the response categories for insurance status to better understand what types of insurance participants in the “other insurance” category may have.

| Participation | Participants | Survey Respondents | Quit | Responder Quit Rate |
|---|---|---|---|---|
| **Phone-based** | 1,656 | 398 | 121 | 30% |
| **Medicaid** | 633 | 138 | 41 | 30% |
| **Other insurance** | 818 | 225 | 70 | 31% |
| **Uninsured** | 181 | 29 | 7 | 24% |
| **No response** | 24 | 6 | 3 | 50% |
| **Web-only** | 1,278 | 58 | 19 | 33% |
| **Medicaid** | 282 | 9 | 3 | 33% |
| **Other insurance** | 585 | 33 | 11 | 33% |
| **Uninsured** | 383 | 16 | 5 | 31% |
| **No response** | 28 | Excluded | | |

## Overall Quit Rate by Quit Medication

Use of nicotine replacement therapy (NRT) is an evidence-based strategy to increase successful commercial tobacco cessation. IDQL program participants are recommended to use NRT for 8-12 weeks. Phone program participants are eligible for up to 8 weeks of monotherapy or combination therapy NRT medication at no cost and web-only program participants for four weeks of combination NRT only. In the table below, “combination” represents participants who received two forms NRT, usually a nicotine patch combined with nicotine gum or lozenge. Research demonstrates that combining the patch with gum or lozenges is more effective than one product alone.

In the phone program, individuals who received all 8 weeks of NRT reported the highest quit rate (41% for combination therapy and 38% for monotherapy) compared to participants who did not receive any NRT (29%) demonstrating the importance of NRT with coaching in helping participants successfully quit.

| NRT Offering | Participants | Survey Respondents | Quit | Responder Quit Rate |
|---|---|---|---|---|
| **Phone-based** | | | | |
| **8 weeks combination** | 315 | 98 | 40 | 41% |
| **8 weeks monotherapy** | 242 | 95 | 36 | 38% |
| **4 weeks combination** | 423 | 83 | 16 | 19% |
| **4 weeks monotherapy** | 298 | 54 | 10 | 19% |
| **2 weeks monotherapy** | 13 | 6 | 1 | 17% |
| **No NRT** | 365 | 62 | 18 | 29% |
| **Web-only** | | | | |
| **4 weeks combination** | 637 | 31 | 16 | 52% |
| **No NRT** | 641 | 27 | 3 | 11% |

## Quit Rate by Referral Type

Participants who self-referred contacted the IDQL program on their own by calling 1-800-QUIT-NOW or enrolling on the website. Provider-referred participants had a referral sent by fax, through the online web referral portal, or directly from the electronic health record ('eReferral'), and were proactively contacted by the IDQL program. Self-referred participants had a higher reported quit rate than provider-referred participants, perhaps indicating increased motivation to quit. The table excludes web-only program participants.

| Referral Type | Participants | Survey Respondents | Quit | Responder Quit Rate |
|---|---|---|---|---|
| **Self-referred** | 1,529 | 359 | 110 | 31% |
| **Provider-referred** | 127 | 39 | 11 | 28% |

## Quit Rate by Text Program Participation

A text program of motivational and interactive messages is available to both web-only program participants and phone program participants, this is an 'opt in' program. The responder quit rates for those who "opted in" and participants who did not "opt in" are similar (30% and 31%, respectively).

| Text Program | Participants | Survey Respondents | Quit | Responder Quit Rate |
|---|---|---|---|---|
| **Phone Program** | | | | |
| **Opted in to texting** | 1,142 | 261 | 78 | 30% |
| **Did not opt in to texting** | 514 | 137 | 43 | 31% |
| **Web Program** | | | | |
| **Opted in to texting** | 390 | 15 | 5 | 33% |
| **Did not opt in to texting** | 888 | 43 | 14 | 33% |

## Quit Rate by Call Completed

Coaching over the phone increases the chances of cessation, and research suggests that completing three or more calls is best for cessation. Responder quit rates ranged from 19% for participants who completed one call to 44% for participants who completed five calls. The following tables exclude web-only program participants.

| Coaching Calls Completed | Participants | Survey Respondents | Quit | Responder Quit Rate |
|---|---|---|---|---|
| **Intake only** | 120 | 12 | 3 | 25% |
| **1** | 703 | 110 | 21 | 19% |
| **2** | 282 | 67 | 13 | 19% |
| **3** | 178 | 49 | 19 | 39% |
| **4** | 100 | 37 | 11 | 30% |
| **5+** | 273 | 123 | 54 | 44% |

The table below shows the cumulative number of participants who completed each coaching call as a percentage of all callers who enrolled. Of the participants who enrolled in the program (i.e. completed the first coaching call), 54% completed one call, 36% completed at least three coaching calls and 18% completed at least five coaching calls.

| Coaching Calls Completed | Participants Reaching Call | Percent of Enrolled Participants Reaching Call |
|---|---|---|
| **Intake only** | 1,656 | |
| **1** | 1,536 | 100% |
| **2** | 833 | 54% |
| **3** | 551 | 36% |
| **4** | 373 | 24% |
| **5+** | 273 | 18% |

# Quit Rate by Tobacco Use Patterns

In this section, the proportion of respondents reporting having quit using commercial tobacco are delineated by:

- Tobacco use type
- Duration of tobacco use

Web-only program participants are not asked about the types of commercial tobacco they use or the duration of use, therefore are excluded from this section.

## Quit Rate by Tobacco Use Type

Cigarettes are the predominate form of commercial tobacco products used by phone program participants. Among IDQL phone program participants who reported smoking cigarettes, 30% reported quitting. Note: Because participants may use more than one form of commercial tobacco, individuals may be represented in multiple categories in the “by product type” rows in the table below.

Participants who used more than one commercial tobacco product (dual/poly product use) reported lower quit rates compared to participants who used only one commercial tobacco product (single-use tobacco).

| Tobacco Type | Participants | Survey Respondents | Quit | Responder Quit Rate |
|---|---|---|---|---|
| **By product type** | | | | |
| **Cigarettes** | 1,519 | 363 | 109 | 30% |
| **eCigarettes or vaping products** | 234 | 57 | 16 | 28% |
| **Cigars, cigarillos or little cigars** | 62 | 15 | 5 | 33% |
| **Smokeless tobacco (chew, dip, snuff)** | 97 | 23 | 4 | 17% |
| **Pipe** | 9 | 5 | 1 | 20% |
| **Other tobacco** | 7 | Excluded | | |
| **By single or dual/poly use** | | | | |
| **Single-use tobacco** | 1,391 | 335 | 106 | 32% |
| **Dual/Poly product use** | 265 | 63 | 15 | 24% |

## Years of Tobacco Use

Most IDQL phone program participants have used commercial tobacco for 10 or more years (n=224) and report lower quit rates (27%) compared to phone program participants who have used commercial tobacco for five years or less (55%).

| Years of Tobacco Use | Participants | Survey Respondents | Quit | Responder Quit Rate |
|---|---|---|---|---|
| **Up to 5 years** | 40 | 11 | 6 | 55% |
| **6 to 10 years** | 57 | 8 | 0 | 0% |
| **Over 10 years** | 913 | 224 | 60 | 27% |

## Impact of the COVID-19 Pandemic

On July 27th 2020, several questions were added to the phone intake to measure the impact of the COVID-19 pandemic on participants' tobacco use and quitting efforts. These questions were asked of cigarette and vape users. The following tables exclude web-only program participants, participants with an intake prior to adding of the questions, and participants who refused or responded "Don't know" to the questions.

Among participants who smoked cigarettes and stated the COVID-19 pandemic increased their motivation to quit the overall responder quit rate was 45%, compared to a responder quit rate of 18% for participants who smoked cigarettes but reported COVID-19 decreased their motivation to quit.

| Cigarette Users' Responses | Participants | Survey Respondents | Quit | Responder Quit Rate |
|---|---|---|---|---|
| **Because of COVID-19, has your motivation to quit cigarettes increased, decreased or stayed the same?** | | | | |
| **Increased** | 197 | 44 | 20 | 45% |
| **Stayed the same** | 248 | 60 | 17 | 28% |
| **Decreased** | 30 | 11 | 2 | 18% |
| **Because of COVID-19, has the amount you smoke increased, decreased or stayed the same?** | | | | |
| **Increased** | 206 | 53 | 19 | 36% |
| **Stayed the same** | 227 | 51 | 17 | 33% |
| **Decreased** | 44 | 10 | 3 | 30% |

| Cigarette Users' Responses | Participants | Survey Respondents | Quit | Responder Quit Rate |
|---|---|---|---|---|
| **To what extent, if any, do you believe that continued smoking affects the risk of getting coronavirus or having a more serious case?** | | | | |
| **Definitely increases** | 211 | 49 | 18 | 37% |
| **Might increase** | 75 | 18 | 6 | 33% |
| **Does not change** | 106 | 27 | 8 | 30% |
| **Might reduce or definitely reduces** | 14 | Excluded | | |

| eCigarette and Vape Users' Responses | Participants | Survey Respondents | Quit | Responder Quit Rate |
|---|---|---|---|---|
| **Because of COVID-19, has your motivation to quit e-cigs/Vaping increased, decreased or stayed the same?** | | | | |
| **Increased** | 29 | 6 | 2 | 33% |
| **Stayed the same** | 38 | 9 | 3 | 33% |
| **Decreased** | 5 | 3 | 1 | 33% |
| **Because of COVID-19, has the amount you use e-Cigs or vape increased, decreased, stayed the same?** | | | | |
| **Increased** | 23 | 6 | 2 | 33% |
| **Stayed the same** | 40 | 10 | 3 | 30% |
| **Decreased** | 10 | 4 | 1 | 25% |
| **To what extent, if any, do you believe that continued vaping affects the risk of getting coronavirus or having a more serious case?** | | | | |
| **Might increase or definitely increases** | 48 | 10 | 4 | 40% |
| **Does not change** | 13 | 5 | 1 | 20% |
| **Might reduce or definitely reduces** | Excluded | | | |

# Quit Rate by Demographics

In this section, the proportion of respondents reporting having quit using tobacco are described by:

- Gender
- Age
- Race and ethnicity
- Education level
- LGBTQ+ identity
- Behavioral health condition
- Veteran status
- Priority populations

## Gender Distribution

Females make up the majority of IDQL program participants (n=1,794) and reported a quit rate of 29%, while males were less than half of the IDQL program participants (n=1,127) and reported a quit rate of 34%. These data are consistent with trends in commercial tobacco cessation research and quitlines overall.

| Gender | Participants | Survey Respondents | Quit | Responder Quit Rate |
|---|---|---|---|---|
| **Female** | 1,794 | 259 | 74 | 29% |
| **Male** | 1,127 | 194 | 65 | 34% |
| **Other genders or unspecified** | 13 | Excluded | | |

## Age Distribution

IDQL program participants were fairly evenly distributed between the age groups of 25 – 34 years (n=626), 35 – 44 years (n=671), 45 – 54 years (n=543), and 55 – 64 (n=624). Participants aged 35-44 years reported the highest quit rate at 34%.

| Age Group | Participants | Survey Respondents | Quit | Responder Quit Rate |
|---|---|---|---|---|
| **17 or under** | 21 | Excluded | | |
| **18-24** | 171 | 13 | 3 | 23% |
| **25-34** | 626 | 58 | 17 | 29% |
| **35-44** | 671 | 73 | 25 | 34% |
| **45-54** | 543 | 84 | 26 | 31% |
| **55-64** | 624 | 141 | 43 | 30% |
| **65+** | 278 | 86 | 25 | 29% |

## Racial Distribution

Each IDQL program participant could identify with more than one racial or ethnic identity. Participants who identified as two or more races were grouped under the “More than one race” category. Due to the low number of responses the following groups were all combined into one “Some other race” category: Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and individuals identifying as “Some other race”. Note: This question is not asked online and therefore web-only program participants are excluded from the table. In addition, participants speaking Korean, Vietnamese, Cantonese and Mandarin are referred to the Asian Smokers’ Quitline, therefore Asian participants are expected to be underrepresented in the IDQL program population.

Among racial identity, “White” was the most frequently chosen response option (n=1,429) and had a responder quit rate of 28%.

Among ethnic identity, “Not Hispanix/Latinx” was the most frequently chose response option (n=1,488) and had a responder quit rate of 30%.

| Race and Ethnicity | Participants | Survey Respondents | Quit | Responder Quit Rate |
|---|---|---|---|---|
| **Race** | | | | |
| **American Indian or Alaska Native** | 36 | 15 | 6 | 40% |
| **White** | 1,429 | 341 | 96 | 28% |
| **Some other race** | 35 | 13 | 6 | 46% |
| **More than one race** | 64 | 17 | 8 | 47% |
| **No response** | 92 | 12 | 5 | 42% |
| **Ethnicity** | | | | |
| **Hispanic/Latinx** | 143 | 29 | 9 | 31% |
| **Not Hispanic/Latinx** | 1,488 | 360 | 109 | 30% |
| **No response** | 25 | 9 | 3 | 33% |

## Education Distribution

The most frequently reported category for highest level of education among IDQL program participants were “high school diploma or GED” (n=1,030) and “some college or university” (n=975) with responder quit rates of 29% and 33%, respectively.

| Highest Level of Education | Participants | Survey Respondents | Quit | Responder Quit Rate |
|---|---|---|---|---|
| **8th grade or less** | 75 | 13 | 3 | 23% |
| **Some high school** | 351 | 56 | 18 | 32% |
| **High school diploma or GED** | 1,030 | 161 | 47 | 29% |
| **Some college or university** | 975 | 158 | 52 | 33% |
| **College degree, including vocational school** | 471 | 67 | 20 | 30% |
| **No response/don’t know** | 30 | Excluded | | |

## Sexual Orientation and Gender Identity

Each IDQL program participant could identify with more than one sexual orientation or gender identity. Most participants did not report being LGBTQ (n=2,735). Less than 200 IDQL program participants identified as LGBTQ and reported a lower quit rate compared to participants who did not identify as LGBTQ (19% and 31%, respectively). These data are consistent with trends in commercial tobacco cessation research and quitlines overall.

| Sexual Orientation and Gender Identity | Participants | Survey Respondents | Quit | Responder Quit Rate |
|---|---|---|---|---|
| **Not LGBTQ** | **2,735** | **429** | **135** | **31%** |
| **LGBTQ** | **199** | **27** | **5** | **19%** |
| **Bisexual** | 115 | 15 | 2 | 13% |
| **Gay or lesbian** | 67 | 9 | 2 | 22% |
| **Queer** | 18 | Excluded | | |
| **Transgender** | 19 | 5 | 1 | 20% |

## Quit Rate by Behavioral Health Conditions

IDQL program participants responded to questions during their intake call regarding current behavioral health (BH) conditions they may live with, including depression, anxiety, and substance abuse. Over 1,500 program participants reported living with one or more BH conditions compared to 1,421 who reported no BH condition. Living with a BH condition corresponded with a lower quit rate. Participants living with one BH condition had a quit rate of 26%, participants living with two or more BH conditions had a quit rate of 30%, and participants without a BH condition had a quit rate of 36%. These data are consistent with trends in commercial tobacco cessation research and quitlines overall.

| Number of BH Conditions | Participants | Survey Respondents | Quit | Responder Quit Rate |
|---|---|---|---|---|
| **No BH conditions** | 1,421 | 179 | 65 | 36% |
| **One BH condition** | 864 | 176 | 45 | 26% |
| **Two or more BH conditions** | 649 | 101 | 30 | 30% |

## Quit Rate by Veteran Status

Just over 200 IDQL program participants reported being a veteran and reported a quit rate of 35%.

| Veteran status | Participants | Survey Respondents | Quit | Responder Quit Rate |
|---|---|---|---|---|
| **Veteran** | 209 | 48 | 17 | 35% |
| **Not a veteran** | 2,674 | 401 | 120 | 30% |
| **No response** | 51 | 7 | 3 | 43% |

## Quit Rate by Overall Priority Population

IDQL recognizes the following priority populations: Medicaid-insured participants, participants who live with one or more BH condition, participants under the age of 18, participants who identify as American Indian or Native American, participants who identify as Hispanic or Latino/Latina, participants who identify as LGBTQ, and participants who have veteran status. These participants are all grouped into one priority population category in the table below.

Over 2,000 IDQL program participants identify with a priority population. Participants in priority populations reported a lower quit rate compared to participants who did not identify with a priority population (29% and 35%, respectively).

| Priority Population | Participants | Survey Respondents | Quit | Responder Quit Rate |
|---|---|---|---|---|
| **Part of a priority population** | 2,004 | 357 | 105 | 29% |
| **Not part of a priority population** | 930 | 99 | 35 | 35% |

# Program Satisfaction

IDQL program participants were surveyed about their satisfaction with the overall service of the quitline program, the usefulness of the materials they received, and the usefulness of the coaches and counselors. “Don’t know” or missing responses are excluded from the denominator. Satisfaction rates of 90% or higher were noted in all categories.

| Satisfied With… | Survey Respondents | Satisfied | Percent Satisfied |
|---|---|---|---|
| **Overall program** | 428 | 392 | 92% |
| **Provided materials** | 358 | 327 | 91% |
| **Coaches and counselors** | 362 | 326 | 90% |

# Cost Effectiveness

The following section provides a cost-effectiveness analysis for the different populations using the IDQL program services – all program participants, phone program participants, web-only program participants, and priority population participants. The cost to achieve each desired outcome (cessation) is a way of comparing the cost-effectiveness of various health care interventions. Cost per quit is calculated as the cost for all program participants divided by the estimated number of participants who report successfully quitting tobacco.

The analysis takes into account the ongoing costs associated with the services a participant receives – online and phone intakes, coaching calls, quit medications shipped, and text program participation. It excludes any one-time project costs such as eReferral implementations, as well as costs associated with general inquiries that are not directly related to a participant attempting to quit.

In 2020, the web-only program cost $183.47 per successful quit, lower than the 2019 cost per quit ($218.82). While the phone program cost $622.60 per successful quit in 2020, which was 4% higher than the 2019 cost per quit ($598.25). However, the web-only program had a lower overall quit rate compared to the phone program (28% quit rate for web-only 31% quit rate for phone program completing 1 call and 39% quit rate for phone program completing at least 3 calls). Note, the low response rate (5%) for the evaluation of the web-only program means these data should be interpreted with caution.

Each program draws a different population of tobacco users with significant demographic differences. Phone program participants are on average more likely to be female, older, less likely to have commercial health insurance, and more likely to live with a behavioral health condition. All of these factors are associated with lower likelihood of cessation and often require more intensive interventions to successfully quit using commercial tobacco. In addition, the response rate for web-only program participants is low and may reflect a biased sample of individuals who were highly motivated and engaged in their cessation attempt, thus artificially increasing the program quit rate.

The combination of more limited program offerings and a survey sample that reports higher than expected quit rates leads to a web-only program that appears highly cost effective. Conversely, the phone program provides a more staff intensive program and critical access to cessation support for participants who may not be able to access or have interest in the web-only program.

| Participant Group | All participants | Phone-based participants | Web-only participants | Priority Populations |
|---|---|---|---|---|
| **Number of participants in 2020** | 4,419 | 1,788 | 2,631 | 2,729 |
| **Responder quit rate*** | 30.7% (26.6%-35.1%) | 30.4% (26.1%-35.1%) | 32.8% (22.1%-45.6%) | 29.4% (24.9%-34.3%) |
| **Estimated quit participants** | 1,357 (1,175-1,551) | 544 (467-628) | 862 (581-1,200) | 803 (680-936) |
| **Overall expense** | $496,569 | $338,438 | $158,131 | $345,705 |
| **Cost per successful quit** | $366.01 ($320.15-$422.45) | $622.60 ($539.27-$725.22) | $183.47 ($131.81-$271.96) | $430.71 ($369.32-$508.75) |

*** The response rate for the phone and web-only programs were unequal. 95% confidence interval included where relevant.**

The costs of continued smoking are enormous in Idaho, with approximately $508 million in direct health care costs, and $434 million in lost productivity per year.[2] While commercial tobacco users incur higher medical expenses than non-tobacco users, quitting can help reduce the costs and the longer a person is quit from commercial tobacco the associated illnesses being to decline leading to a reduction in medical expenses. Quitline programs, like the IDQL, have been shown to be effective in helping people quit commercial tobacco and cost effective.[3,4,5] Offering quitline services is considered a best practice for population level tobacco prevention and control efforts.[6]

[2] Tobacco Free Kids – The Toll of Tobacco in Idaho
https://www.tobaccofreekids.org/problem/toll-us/idaho

[3] 3 Fiore MC, Jaen CR, Baker TB, et al. (May 2008). Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service.

[4] Reisinger SA, Kamel S, Seiber E, Klein EG, Paskett ED, Wewers ME. Cost-Effectiveness of Community-Based Tobacco Dependence Treatment Interventions: Initial Findings of a Systematic Review. Prev Chronic Dis 2019;16:190232. DOI: http://dx.doi.org/10.5888/pcd16.190232

[5] North American Quitline Consortium. (2009). Tobacco Cessation Quitlines: A Good Investment to Save Lives, Decrease Direct Medical Costs and Increase Productivity. Phoenix, AZ: North American Quitline Consortium

[6] Centers for Disease Control and Prevention. Best practices for comprehensive tobacco control programs — 2014. Atlanta (GA): US 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; 2014. https://www.cdc.gov/tobacco/stateandcommunity/best_practices/pdfs/2014/comprehensive.pdf.

# Conclusions and Opportunities

Overall, Project Filter and the IDQL assisted an estimated 503 phone program participants and 419 web-only program participants with quitting commercial tobacco in Fiscal Year 2021. The IDQL, a population level program that provides personalized cessation support for each participant was effective in helping people in their efforts to quit commercial tobacco, with 30% of the phone program participants reporting no use of commercial tobacco at six-months post program enrollment.

There is insufficient data to directly compare the phone and web-only programs on cessation and cost effectiveness. Each program draws a different population of tobacco users with significant demographic differences. Phone participants are on average more likely to be female, older, less likely to have commercial health insurance, and more likely to live with a behavioral health condition. All of these factors are associated with lower likelihood of cessation and these populations often require more intensive interventions to become tobacco-free. In addition, the response rate for the web-only program evaluation was low (5%). This evaluation was conducted via web-based survey rather than a phone interview. The program participants who completed the survey may reflect a biased sample of individuals who were highly motivated and engaged in their cessation attempt, thus artificially increasing the program quit rate.

We report program cost-effectiveness as a cost per successful quit by comparing the cost to run the program compared to the number of people who quit. The phone program and web-only program offer different types and levels of support and were used by demographically different populations – individuals who have more risk factors for continued smoking and barriers to cessation tend to participate in the phone program compared to the web-only program. These contextual factors are important to keep in mind when considering the cost-effectiveness of a program. The cost per quit for the phone program was $622.60, and the cost per quit for the web-only program was $183.47. The reduced medical costs related to smoking will reach over half a million dollars per year within 5 years for the individuals who quit in 2021 and increase every year, with additional improved economic productivity that adds to the Idaho economy.

At National Jewish Health, we are honored and excited to continue our partnership with the Idaho's Tobacco Prevention and Control program to serve the residents of the state with evidence-based treatment. We continue our efforts in finding new ways to reach disparate populations and meet the mutual goals of decreasing tobacco use among all Idaho participants.

# Acknowledgements

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# Appendix A – Survey Methodology

The surveys in this report were conducted during July 2020 – June 2021, representing intakes during calendar year 2020. Participants enrolled in the phone program were surveyed via phone, with up to seven phone outreach attempts conducted for each participant throughout the survey period at different times to maximize response. Web-only participants were emailed an invitation to complete the evaluation survey, with up to two reminder emails.

Participants are asked about their tobacco use and assigned a current status of “Quit” if the participant indicated that they have not used tobacco — even a puff — in the 30 days prior to the call, and included e-cigarettes in the same period, as recommended by NAQC. This definition of abstinence is referred to as the point prevalence rate, and is the industry standard for determining follow-up quit rate. Due to the number of survey responses, some demographic breakdowns yielded limited results. Throughout the report, breakdowns with fewer than five respondents have been excluded.

Of the individuals identified and reached out to for a follow-up survey, a percentage were not successfully contacted for a survey. Some are not contacted because they cannot be reached after multiple attempts and others because they choose not to participate in the survey despite consenting during the intake process.

NAQC/Professional Data Analysts Inc. (PDA) recommend calculating responder rates and not intention to treat (ITT) rates, because calculating ITT assumes that all non-responders are using tobacco and includes them in the sample. In this evaluation report, responder quit rates are reported.