The Youth Health Tech survey (YHTS) is conducted by the Northwest Portland Area Indian Health Board (NPAIHB). The NPAIHB is a non-profit tribal advisory organization serving forty-three federally recognized tribes of Oregon, Washington, and Idaho. The previous versions of the survey have been used to influence and inform the content and messaging channels for We R Native. We R Native is a comprehensive health resource for Native youth, by Native youth, providing content and stories about the topics that matter most to them.

Methods:
Unique to the 2020 iteration of the YHTS, all recruitment and data collection was conducted exclusively online. Between October 2020 and November 2020, utilizing We R Native social media channels and random email sampling, Native youth between the ages of 15-24 were recruited to participate in the YHTS.

Participation in this study was voluntary and an incentive to participate in the study was offered to the participants. Upon completion of the survey, respondents were provided a unique code to text to 97779, and were eligible for a $10 Amazon gift card. Participants were eligible if they were between the ages of 15-24 identified as American Indian or Alaska Native, and resided within the United States.

Development of the study instruments and recruitment procedures were conducted collaboratively between NPAIHB and the Centers for American Indian and Alaska Native Health at the Colorado School of Public Health.

Strengths and Limitations:
There are notable limitations within this research study. First, this study relied on online recruitment and sampling. The results of this study may not be generalizable to Native youth residing in areas with limited and/or poor internet access. Additionally, with this study relying specifically on online recruitment, Native youth who do not have social media may have been missed. Finally, this study relied on self-reported data which cannot be independently verified.

However, despite these limitations, there are numerous strengths within the 2020 YHTS. First, this study had wide representation of Native youth residing in different areas and sectors (i.e. Urban vs. Reservations) across the United States. Additionally, this survey was one of the first to access impact of the COVID-19 pandemic on internet and technology access within Native youth. Finally, a major strength of this study was the wide representation of sexual and gender minorities within the overall sample.
In total, 349 Native youth completed the survey.

Average age of participants was 19.19

Overall, 349 participants completed the 2020 Health Tech Survey. In terms of racial and ethnic identity, 179 (51.29%) participants identified primarily as Native, 170 participants identified as multi-racial Native adolescents. Among this 170 participants: 25.8% identified as both Black and AIAN, 1.1% identified as Asian and AIAN, 25.8% identified as White and AIAN, 13.5% identified as Hispanic/Latino and AIAN, and 1.1% identified as Native Hawaiian or Pacific Islander and AIAN.
The only states without representation are: Alabama, Arkansas, Connecticut, Delaware, Hawaii, Illinois, Iowa, Kentucky, New Hampshire, New Jersey, North Dakota, Rhode Island, and Vermont.
Understanding technology use and online behavior amongst Native youth can help inform not only content creation, but future public health interventions and surveys. Unique to the 2020 iteration of the Youth Health Tech Survey, we collected information regarding what type of device was used to access our surveys. Over 200 participants (69.34%) of Native youth accessed our survey and social media platforms via iPhone, while only 55 participants accessed our survey via Android devices. Additionally, 326 participants reported using their phone to get online at least once a day, and reported having regular access to different technology devices including a desktop or laptop computer in addition to their smartphones.

*Health trackers includes Fitbit, fuel band, Apple Watch, etc.
**Anonymous sharing and question apps included Whisper, YikYak, and Ask.FM.
Overall, Native youth reported their **favorite thing to do online is scroll on various social media platforms** (85.95%), followed by watching videos (75.07%), and checking in on friends or family members (68.76%). The question, "what do you normally do when you're online" reaffirms and correlates with scrolling as their favorite behavior with 85.95% of Native youth indicating their normal online behavior is to just look at content. Finally, in order to better inform the text messaging service offered by We R Native and the Northwest Portland Area Indian Health Board, we also assessed the average number of text messages sent within one day 68.76% of Native youth self-reported sending an average of 1-50 texts per day.
AVERAGE SOCIAL MEDIA USE

37.8% of youth report spending an average of 3 to 4 hours per day on social media.

PREPARED SOCIAL MEDIA PLATFORMS

TikTok 16.6%
Instagram 36.7%
Facebook 17.2%
Twitter 6.3%
Snapchat 21.2%
Other 2.0%
In your opinion, what 3 topics are the most important for Native youth to learn about?

- Native Identity or Cultural Pride: 73%
- Mental Health: 57%
- Social Justice and Equality: 31%
- Physical Health: 18%
- Alcohol or Drug Use: 18%
- Making a Difference: 16%
- Sexual Health: 14%
- Spiritual Health: 14%
- The Environment: 12%
- Domestic Violence: 12%
- Dating and Healthy Relationships: 11%
- Diet and Nutrition: 7%
- Communication Skills: 7%
- Wellness Skills: 5%
- Life Hacks: 3%
- Other: 2%

Overwhelmingly, the most important topic to Native youth is learning more about their Native Identity and Cultural Pride. The second most important is Mental Health, including depression, anxiety, and stress. Finally, the third most important topic is Social Justice and Equality.
In order to better understand where Native youth are currently accessing health information, we asked “People get information about health from many different sources. Please mark how often you’ve gotten health information from each of the following sources.” The results indicated Native youth rely most on the Internet for accessing health information (53.5%) on a weekly basis. Another common source for health information was social media platforms (47.8%). Additionally, in order to expand mHealth efforts, we asked how many health-related text messages Native youth would be open to receiving, and 48.1% would be open to receiving 1-3 health related texts per week.

Sources for Health Information

# of health-related texts Native Youth would be willing to receive

- None (10.37%)
- 1 per day (23.34%)
- 2-3 per day (15.27%)
- 1 per week (27.09%)
- 2-3 per week (21.33%)
- Other (2.59%)
Unique to the 2020 version of the Youth Health Tech Survey, we assessed how internet access had been impacted due to COVID-19, and how much their online frequency had changed due to COVID-19. Overall, 61.89% of Native youth reported being online more than before the onset of pandemic, and only 6.02% reported being online less than before the start of the pandemic.

A major concern of the Northwest Portland Indian Health Board was Native youth, specifically within reservation settings, would have decreased access to internet services. Based on our assessment, only 8.02% of Native youth had been negatively impacted in terms of internet access by COVID-19. The majority of youth negatively impacted resided within California, Oregon, and Washington. If they were negatively impacted, we asked where they accessed the internet before, and 30.6% had reduced access at home, and 28.2% previously accessed their internet services at school.
An important sub-group of Native youth are youth who identify as a sexual and/or gender minority (SGM). Within the 2020 Youth Health Tech survey 138 participants identified as either a sexual and/or gender minority. In order to better understand the specific interests of Native SGM’s, a separate analysis was conducted. This began by combining both sexual and gender minorities into a single variable and running different analyses. As seen on the left, the most important topics of interest for Native SGM’s is Native Identity (71.01%), Mental Health (55.79%), and Social Justice and Equality (35.50%). Based on this separate analysis, and controlling for SGM, these topics are collectively the most important for Native Youth.
There is a gap within the scientific literature examining the health status and behaviors of Native youth who identify as a sexual and/or gender minority. An important component of the Youth Health Tech Survey is to allow Native youth to self-report on their perceived health status.

82.4% of LGBTQ+ AIAN youth report having poor or fair mental health.

This allowed NPAIHB to examine both the physical and mental health of Native SGM youth. On average, Native SGM youth reported higher collective rates of fair or poor mental health than non-SGM Native youth (82.4% to 49.6% retrospectively); however, Native SGM reported having better physical health (62.3%) compared to non-SGM (53.9%).
In order to better understand community surrounding concerning posts online, and how Native youth engage with these posts, we asked "If you’ve ever seen a concerning post on social media (reference to suicide, self-harm, or alcohol/drug abuse) that made you worried about the person who posted it. What (if anything) did you say or do in response?" The most common response was private messaging them (62.75%) and a common response in the "other" category was sending references to hotlines and/or professional services.
54.4% of respondents visited www.weRNative.org in the past 6 months.

42.1% of participants were satisfied with the info found on We R Native.

Content: Informative, easy to access, and Ask Auntie.

Native-Centered: The involvement of Native youth in content creation, and the presence of Native culture in all elements.

Text Messages: Positive and encouraging. Helps them feel less alone.

Resources: Connection to outside resources and We R Healers.

"It makes me love myself more. I love being Native and it makes me proud of who I am." 15-year-old from Colorado

"I never grew up on the rez and I didn't know much about my culture. This is how I keep up with all things Native." 20-year-old from Washington
1. **Building Positive Mental Health**
   - Feelings of happiness, gratitude, joy, etc.

2. **Instilling Native Pride**
   - Building your sense of Identity

3. **Stress or Anxiety**
   - How to positively cope with it.

4. **Developing Positive Mental Health Skills**
   - Finding and maintaining balance through nature, mindfulness, or relaxation

5. **Relationships**
   - Navigating healthy and unhealthy relationships

6. **Suicidality**
   - Either with you or a friend.

7. **Bullying**
   - How to deal with bullying or violence.

---

**Potential Areas of Improvement**

- **Connections**
  - Chats or connections to other reconnecting natives or local chapter groups.

- **Website**
  - Hard to navigate and find information on the website.

- **Representation**
  - Content is geared more towards younger Natives in high school.

---

**We R Native: Preferred Types of Content**

- **Videos**
- **Memes**
- **Posts with images only**
- **Images with a status**
- **Text statuses only**
- **Text with emojis**

---

"It's the Native part for me."

20-year-old from New Mexico
Important Topics Native Youth want to see We R Native address

1. Instagram
2. Text Messages
3. Facebook
4. WRN Website
5. YouTube
6. Snapchat
7. TikTok
8. Twitter
Implications:
Our findings within the YHTS suggest the need for specific social media content and public health programming applicable to Native youth. Specifically, there is an evident need for more mental health programming for this age range of Native youth. Historically, Public Health research and programming have been primarily focused on substance use within Native youth (i.e. Alcohol, keeping Tobacco sacred, etc.) but our results call for a more comprehensive approach involving multiple aspects of mental health including depression, suicidality, PTSD, eating disorders, and more. Additionally, the use of social media as a tool for the dissemination of health-related information is critical to reach Native youth on topics that matter the most to them. Finally, future iterations of the Youth Health Tech Survey hope to better capture the individuality of social media habits of both Urban-based, Rural-based, and Reservation-based youth in order to tailor programming and messaging better to Native youth residing in these locations.

For more information regarding the results of the Youth Health Tech Survey, please contact:
Stephanie Craig Rushing: scraig@npaihb.org
Nicole Reed: nicole.d.reed@cuanschutz.edu