A Study on Private Browsing:
Consumer Usage, Knowledge, and Thoughts

January 2017

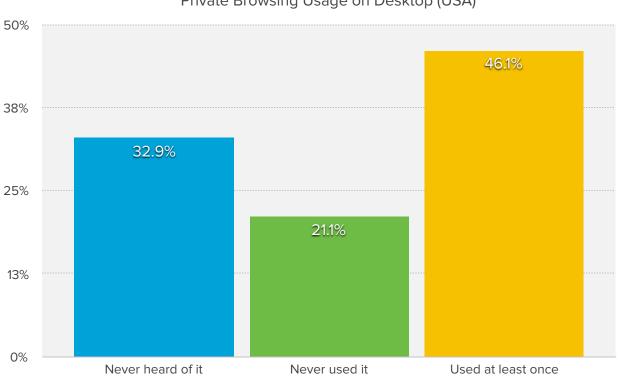# Table of Contents

Introduction

At DuckDuckGo, our vision is to raise the standard of trust online. To that end, we strive to understand what people know about online privacy and how they use the privacy features available to them. This report focuses on the feature in web browsers commonly referred to as "Private Browsing."

"Private Browsing," "Privacy Mode," "Secret Mode," or "Incognito Mode" is a system of web browsing that clears browsing history and file cache after use. Despite Private Browsing being one of the most commonly known and used privacy features, we find that most people misunderstand the privacy protections it provides.

Our findings are based on a survey conducted with a random sampling of 5,710 Americans who were asked to share their experiences with Private Browsing.

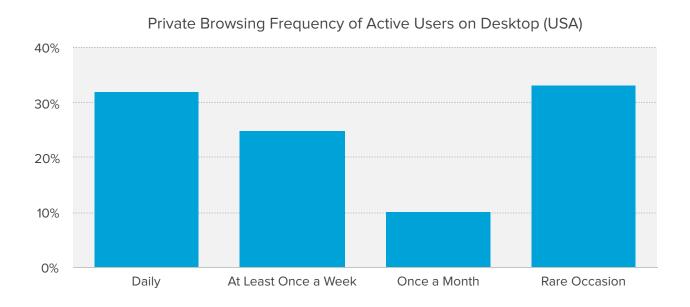# How Do People Use Private Browsing?

46% of Americans have used Private Browsing.

On desktop, we found that 46.1 ±1.7% of people have used a *"Private Browsing Mode"* at least once, and on mobile that number is 43.5 ±2.7%.
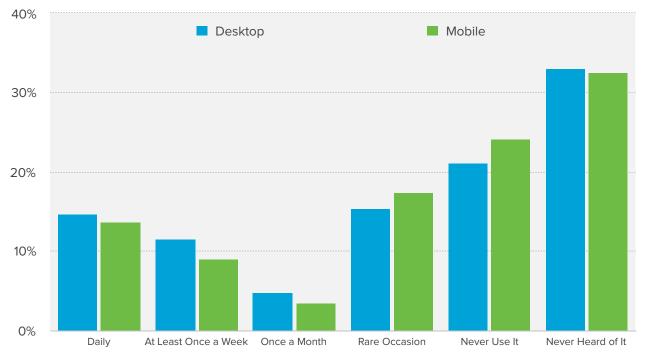
Private Browsing Usage on Desktop (USA)

Of those who have used Private Browsing on desktop, 32.9 ±2.3% report using it "*Daily*," while another 24.8 ± 2.1% report using it "*At Least Once a Week*." On mobile, 31.5 ±3.9% report "*Daily*" usage, while another 20.6 ±3.3% report usage of "*At Least Once a Week*."
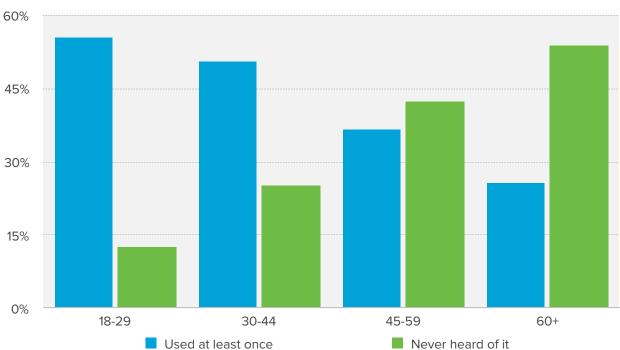
Private Browsing Frequency of Active Users on Desktop (USA)

Private Browsing Frequency by Device Type (USA)

Younger people (18-29) are five times more likely to have heard of Private Browsing than older people (60+), but only twice as likely to have used it. This suggests that older audiences, while less likely to know about Private Browsing, adopt it more frequently once they hear about it.
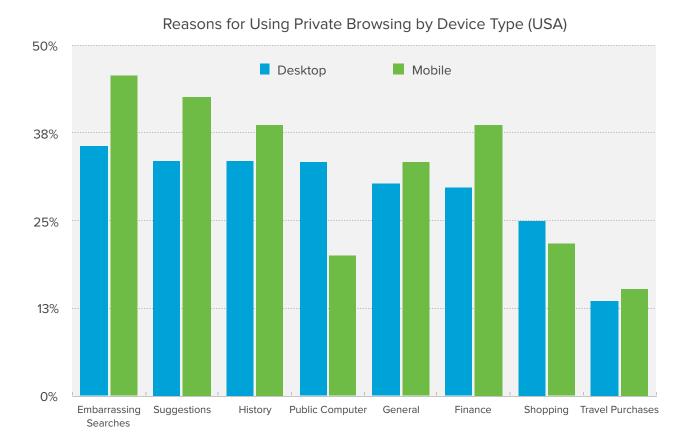
Private Browsing Awareness by Age (USA)

Used at least once   Never heard of it
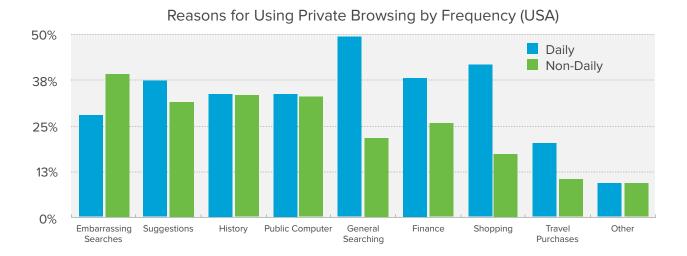
Why Do People Use Private Browsing?

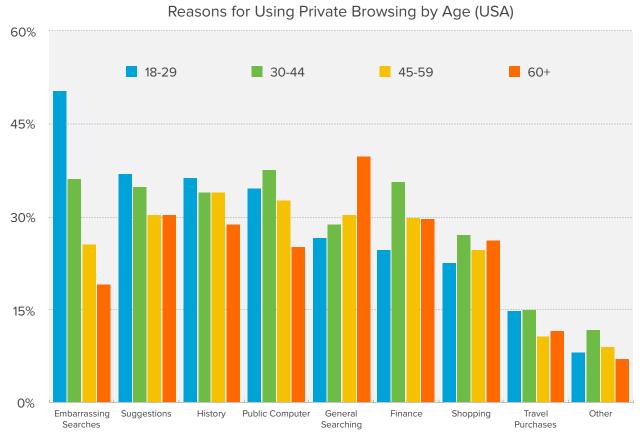# The number one reason people use Private Browsing is "Embarrassing Searches."

The number one reason people use private browsing is "*Embarrassing Searches*," at 35.7 ±2.5%. Other reasons fell between 24.9 ±2.2% and 33.5 ±2.4%, excluding "*Travel Purchases*," and "*Other*."

Reasons for Using Private Browsing by Device Type (USA)

People who use Private Browsing daily are two times as likely to use it for "*General Searching*" and about two and half times more likely to use it for "*Shopping*" than non-daily users.

Reasons for Using Private Browsing by Frequency (USA)

While most reasons for using Private Browsing remain consistent across age brackets, "*Embarrassing Searches*" goes down with age while "*General Searching*" goes up.
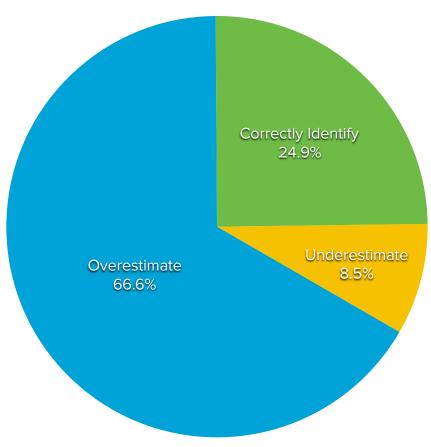
Reasons for Using Private Browsing by Age (USA)

What Do People Know About Private Browsing?

76% of Americans who use Private Browsing mode cannot accurately identify the privacy benefit it provides.

75.8 ±2.2% of people who use Private Browsing mode cannot accurately identify the privacy benefit it provides. Of that group, 66.5 ±2.5% overestimate the protection that Private Browsing provides.
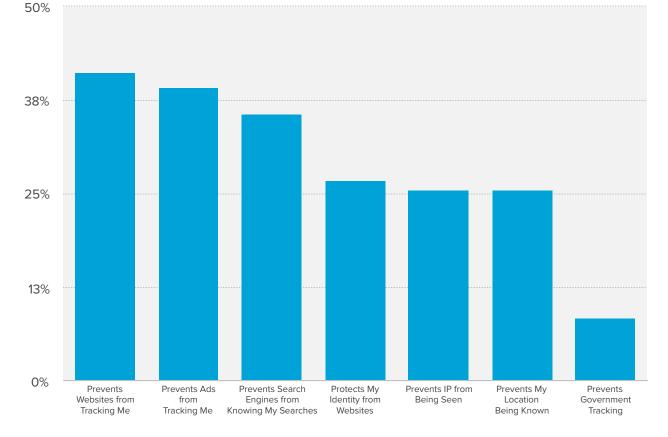
Awareness of Private Browsing Privacy Protections (USA)

Correctly Identify
24.9%

Underestimate
8.5%

Overestimate
66.6%

36% of Americans believe that Private Browsing mode prevents a search engine from knowing their searches.
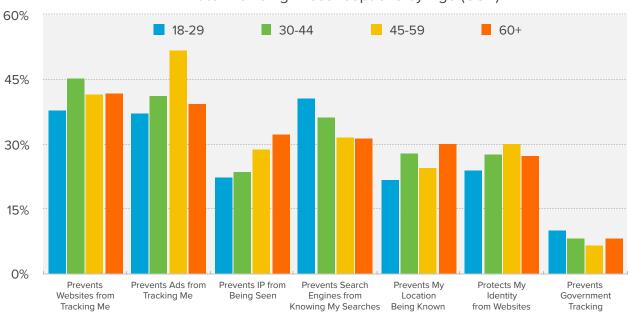
The top 3 misconceptions are:

- 41.0 ±2.5% believe that Private Browsing "*Prevents websites from tracking me.*"

- 39.1 ±2.6% believe that Private Browsing "*Prevents ads from tracking me.*"

- 35.7 ±2.5% believe that Private Browsing "*Prevents search engines from knowing my searches.*"

Most Common Misconceptions of Private Browsing (USA)

For the most part, the misconceptions about Private Browsing are consistent. However, younger audiences are more likely to believe a search engine couldn't see their searches in Private Browsing mode, whereas older audiences are more likely to believe that Private Browsing mode would protect their IP address from being seen.

Private Browsing Misconceptions by Age (USA)

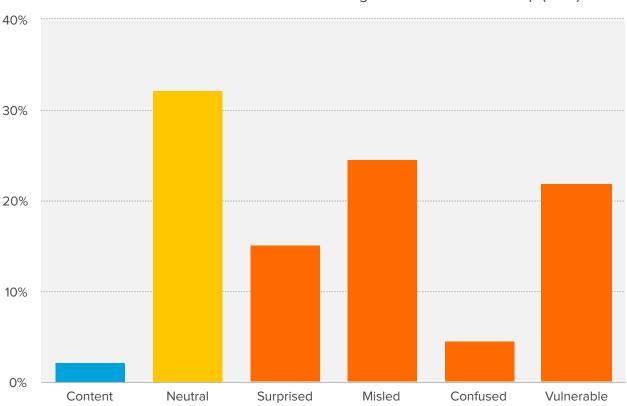**Private Browsing Misconceptions by Usage Frequency (USA)**

How Do Consumers React to Private Browsing Knowledge?

After asking about Private Browsing usage and knowledge, we informed people about what privacy protections Private Browsing provides, and asked about their emotional reaction:
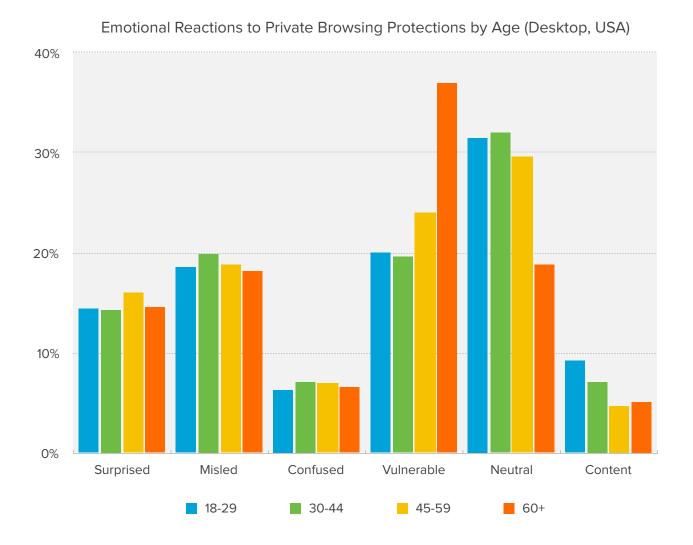
> *Private Browsing mode only prevents your browser history from being recorded on your computer and does not offer any additional protection such as preventing the websites you visit from collecting your information (e.g. your searches on a search engine). How does that make you feel?*

Of the 75.8 ±2.2% of people who have misconceptions about private browsing protections, 65.9 ±2.4% feel "*Surprised*", "*Misled*", "*Confused*" or "*Vulnerable*" upon learning about its real protections.

Emotional Reactions to Private Browsing Protections for Desktop (USA)

These emotional reactions span age. One notable difference is that 32.1 ±6.4% of people over 60 feel "*Vulnerable*" upon learning about Private Browsing's limitations, vs less than 25% in other age groups.
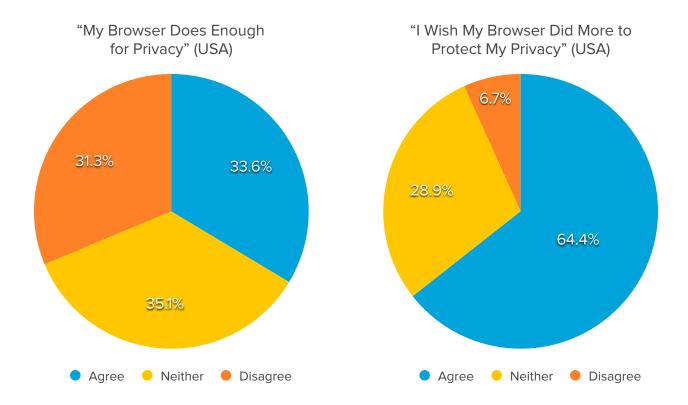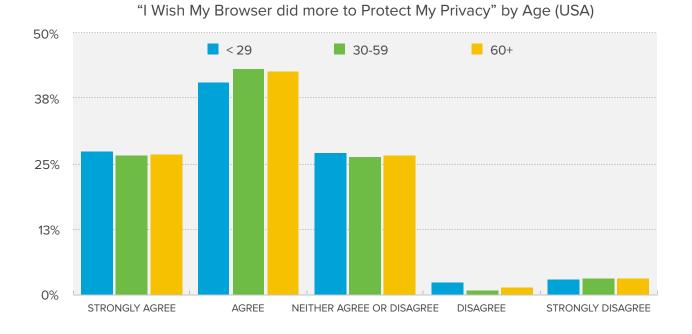
Emotional Reactions to Private Browsing Protections by Age (Desktop, USA)

64% of Americans "Agree" or "Strongly Agree" with the statement "I wish my browser did more to protect my privacy."
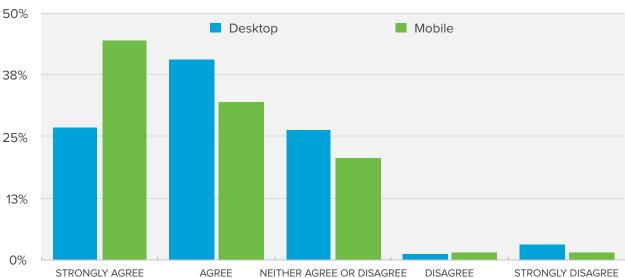
When then asked users to agree or disagree with the statement "*My browser does enough to protect my privacy,*" we found a rather even split. When further asked to agree or disagree with the statement "*I wish my browser did more to protect my privacy*," users were much more strongly in favor of additional privacy protection.

"My Browser Does Enough for Privacy" (USA)

"I Wish My Browser Did More to Protect My Privacy" (USA)

31.3%
33.6%
35.1%

● Agree   ● Neither   ● Disagree

6.7%
28.9%
64.4%

● Agree   ● Neither   ● Disagree

Once again, these findings were consistent across every age group.

"I Wish My Browser did more to Protect My Privacy" by Age (USA)

Though when comparing Desktop vs Mobile, we saw a slight skew with mobile users being more likely to *"Strongly Agree"* than *"Agree."*

"I Wish My Browser did more to Protect My Privacy" by Device Type (USA)

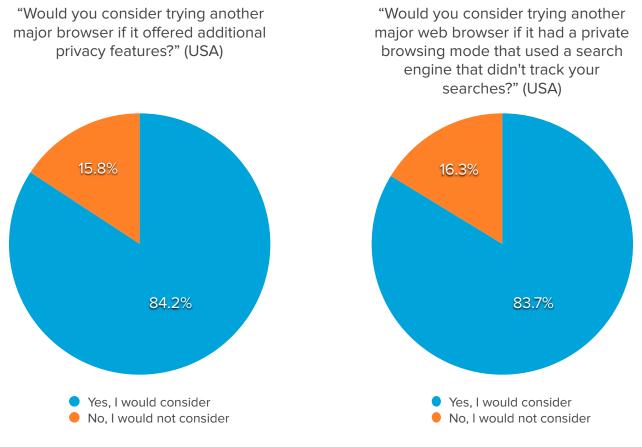# 84% of Americans would consider trying another major web browser if it offered more features to help protect their privacy.

We found people willing to make major changes to better protect their privacy. 84.2 ±1.9% of people say they would "*consider trying another major web browser if it offered more features to help protect your privacy*," and 83.7 ±2.0% say they would "*consider trying another major web browser if it offered a Private Browsing mode that uses a search engine that didn't track your searches*."

"Would you consider trying another major browser if it offered additional privacy features?" (USA)

"Would you consider trying another major web browser if it had a private browsing mode that used a search engine that didn't track your searches?" (USA)

15.8%

84.2%

16.3%

83.7%

- Yes, I would consider
- No, I would not consider

- Yes, I would consider
- No, I would not consider

Key Takeaways about Private Browsing

1. With 46.1 ± 1.7% of American's having used Private Browsing at least once and 26.7 ±3.0% using it at least once a week, it is clear that Private Browsing is a popular privacy protecting feature.

2. However, 75.8 ±2.2% of people who use Private Browsing incorrectly identify the protection that it provides. As 66.5 ±2.5% overestimate its benefits, this leaves a majority of Private Browsing users exposed more than they think they are.

3. When people find out what private browsing actually does, 65.9 ±2.4% feel "*Surprised*", "*Misled*", "*Confused*" or "*Vulnerable.*" 64.0 ±2.6% of people believe their web browser should do more to protect their privacy, and 84.2 ±1.9% are open to trying to a different major web browser if it would provide more privacy protection.

Methodology

These results are based on the polling of a random sample of 5,710 Americans via SurveyMonkey's "Audience" program that "ensures panelists are representative of the U.S. population." Heen, Lieberman and Miethe (2014) confirmed, "Depending on the purpose of the survey research, the average discrepancy rate of 5 to 10% between the particular demographic characteristics of online respondents and their known distribution in the U.S. population may or may not be problematic."[1]

During this survey, respondents reserved the right to decline to answer any survey question. This was allowed in order to prevent biasing answers in the event a user did not understand the question, felt uncomfortable answering the question, or felt there was no answer that accurately represented their response. In these cases of "item non-response," the sample population size was adjusted for that question. A respondent who did not complete all the questions still had their responses included in questions they did complete. The only exception are statements made in this survey that required responses from more than one question.

Respondents were compensated for participation in this survey.

1. http://www.unlv.edu/sites/default/files/page_files/27/ComparisonDifferentOnlineSampling.pdf