

2023

CONSUMER CYBER READINESS REPORT



Cyber Civil
Defense Initiative



Intro

The Second Annual Consumer Cyber Readiness Report reviews consumer attitudes towards digital privacy and security practices online. Together, Consumer Reports, Aspen Digital, and Global Cyber Alliance have reviewed findings from CR's recent nationally representative survey and connected with thought leaders to understand consumer cybersecurity behaviors.

We continue to see developments in consumer cybersecurity practices through adoption of data and privacy practices, awareness of security tools, and improved posture online. But with cybersecurity threats continuing to be big news and an increasing number of attacks affecting many consumers, it's understandable that many people continue to feel overwhelmed and frustrated about their online security.

We must continue to look to industry and government to help alleviate the burden of security on consumers, by advocating for security-by-design of our products and policies and holding companies accountable to improve the ecosystem. We aim to present these findings in a way that can be evaluated by companies and elected officials to understand the consumer landscape and assess how they can improve cybersecurity behaviors for all Americans.

Our hope is that through ongoing collaboration, we can work alongside consumers to ensure that they have confidence when engaging online, adopt tools or services that lead to improved cyber hygiene, and equip themselves in the event of future threats.

Along with examining the survey findings, we have enlisted commentary from cybersecurity leaders to provide their reflections on consumer behavior and strategies on how we can continue to ensure cyber civil defense is a national priority.

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I'm encouraged by the positive trends we've seen on cybersecurity awareness over recent years, but there is still a lot of work left to do to move from consumer awareness to action. We need to continue expanding cybersecurity education opportunities for everyone: That includes providing opportunities for kids and adults on cybersecurity basics, upskilling the cybersecurity workforce, and making cybersecurity a part of community conversations and resources.



CRAIG NEWMARK

Founder of craigslist, Philanthropist, and Lead of the #CyberCivilDefense initiative

Key Findings

PRIVACY

How Consumers Protect Their Privacy or Personal Data When It Comes to Passwords	2023
Use a strong password to access your home WiFi network*	86%
Require a password, PIN, or other method to unlock your smartphone	83%
Use multifactor authentication to log in to any of your online accounts*	76%
Use a unique password across your different accounts	67%
Change default passwords on devices*	59%
Use a password manager that automatically creates and stores passwords*	37%

Base: Respondents who did not say "not applicable." Respondents could select all that applied.

*Some response options have been edited for fit. See link below for full language.

Source: [May 2023 Consumer Reports nationally representative American Experiences Survey of 2,000 U.S. adults.](#)

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Use of phishing-resistant authentication methods such as passkeys and FIDO2 keys continues to be effective in protecting privacy and personal data. Longer, easy-to-remember passphrases are better than short, complex, easily forgotten passwords. And the best defense continues to be awareness of social engineering tactics.



NOOPUR DAVIS

Corporate Executive Vice President,
Chief Information Security and
Product Privacy Officer, Comcast

The most common password precautions that Americans take are having a strong password to access their home WiFi network and requiring a password, PIN, or other method to unlock their smartphone. Password managers are considered among the best security measures for your accounts because of their ability to generate long, complex passwords. Adoption of password managers continues to be low among consumers. Lack of adoption can be attributed to the cost of the tool, the skill level needed to use it, or the resistance to adopting an additional security tool. We need to further understand the barriers consumers face when considering using tools like password managers.

Key Findings

PASSWORDS

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As an alternative to passwords, passkeys are an excellent tool for consumers to securely access their web services and devices without having to pay for a password manager or come up with their own unique passwords. However, we need more sites to support passkeys, which will take time.



STACEY HIGGINBOTHAM
Founder, "Stacey on IoT"

Passkeys offer alternatives to passwords with more robust protection against phishing attacks and data breaches. We're monitoring the technology as the next step in consumer protection online. Despite the current barriers to usage and integration across services, these tools offer an opportunity for consumers to forgo creating strong or protected passwords, setting up a password manager, or using a security key—ultimately removing the burden on consumers to ensure that their passwords are safe.



Around three-fourths of Americans use multifactor authentication to log in to at least one online account.

Base: Respondents who did not say "not applicable." Respondents could select all that applied.

Source: [May 2023 Consumer Reports nationally representative American Experiences Survey of 2,000 U.S. adults.](#)

MULTIFACTOR AUTHENTICATION (MFA)

Types of Multifactor Authentication Used by Consumers	2023
SMS or or text-based*	82%
Multi-factor authentication apps*	50%
Phone call authentication	26%
Physical security key*	6%
Other, please specify	2%

Base: Respondents who use multi-factor authentication. Respondents could select all that applied.

*Some response options have been edited for fit. See link below for full language.

Source: [May 2023 Consumer Reports nationally representative American Experiences Survey of 2,000 U.S. adults.](#)

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To borrow from one of my favorite bands, we know you need 'More Than a Password' to keep data secure online—that's why it's super-encouraging to see an increase in consumers enabling MFA. It's quick, it's easy, and it's the best thing you can do to prevent getting hacked. Rock on!



JEN EASTERLY
Director, Cybersecurity and
Infrastructure Security Agency

We wanted to further understand the types of multifactor authentication used by consumers who add an extra layer of protection to their accounts. While most people use SMS or text-based authentication, half of Americans who use multifactor authentication said they use authentication apps such as Duo Mobile or Google Authenticator when accessing their accounts. Though physical security keys are the most secure form of authentication, usage among consumers remains very low.

PRIVACY PROTECTION TOOLS

How Consumers Protect Their Devices	2023		
	Yes	No	Unsure
Implement software updates as soon as they are available	67%	24%	9%
Have software that prevents malware or viruses*	56%	30%	14%
Have a firewall	46%	28%	26%
Have a "virtual private network," or VPN, for accessing the internet	33%	51%	16%
Have a browser extension that blocks trackers*	27%	52%	22%
Have identity theft protection services*	26%	62%	12%
Have software to encrypt files on your device so no one else can use them*	12%	73%	15%

Base: Respondents who did not say "not applicable." Respondents could select all that applied.

*Some response options have been edited for fit. See link below for full language.

Source: [May 2023 Consumer Reports nationally representative American Experiences Survey of 2,000 U.S. adults.](#)

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As cybercriminals adopt generative AI to make their scams more believable and social media has fast become a treasure trove for scraping our personal data and cobbling together the key ingredients for targeted scams and identity threats, now more than ever it's mission critical for people to think beyond device security alone and take steps to protect their privacy and identity. This report helps us understand where we can best help equip people everywhere with the knowledge and tools they need to bolster their cyber safety.



ONDREJ VLCEK
President, Gen

PRIVACY PROTECTION TOOLS

The majority of Americans said they are implementing software updates as soon as they become available, and over half say they have software from a company like McAfee or Norton that helps prevent malware and viruses. Of all the tools and services listed, individuals are most likely to be unsure whether they have a firewall installed on their device and whether they have browser extensions enabled to block trackers. Of the tools we asked about, Americans are least likely to say they have encryption software on devices.



Most Americans say they definitely do *not* have software to encrypt files on the device they use the most.

Base: Respondents who did not say "not applicable." Respondents could select all that applied.

Source: [May 2023 Consumer Reports nationally representative American Experiences Survey of 2,000 U.S. adults.](#)

“ We think our customers will appreciate seeing the label not only on packaging when their products arrive on their doorstep, but also when shopping online. We look forward to working with industry partners and the government to develop a comprehensive 'U.S. Cyber Trust Mark' labeling program that complements and aligns with global security requirements and regulations.



LEILA ROUHI
Vice President of Trust and Privacy,
Amazon's Devices & Services
organization



As we celebrate the introduction of the Cyber Trust Mark and the launch of a national labeling system for consumer connected devices, we look toward how manufacturers will enable security-by-design practices that lead to better security across services and trust by consumers to better safeguard their devices. This relies on a strong plan for consumer education on actions they can take toward enabling privacy protection tools that can be driven through collaboration from public, private, and government sectors.

ACTION CONSUMERS TAKE

Actions Consumers Take to Protect Their Privacy or Personal Data Online	2023
Avoid clicking links in texts from people you don't know	92%
Avoid clicking links in emails from people you don't know	91%
Delete or choose not to install apps on your smartphone if you think they collect too much personal information or do not protect it adequately	83%
Adjust smartphone settings to only allow an app access to your location while you are using the app	82%
Set permissions for apps on your smartphone to block access to things like your camera, location or contacts if they aren't needed for the app to function	79%
Block or routinely delete some or all cookies on your web browser	71%
Adjust the privacy settings in your web browser	63%
Use "private" or "incognito" mode on your web browser when you want to keep your browsing or search history from being saved or seen by others	57%
Review security settings at least once every six months	47%
Encrypt your hard drive	22%

Base: Respondents who did not say "not applicable." Respondents could select all that applied.

Source: [May 2023 Consumer Reports nationally representative American Experiences Survey of 2,000 U.S. adults.](#)

“ It is encouraging to see consumers becoming increasingly thoughtful about sharing their information, reserving access to only those companies that use their data safely, securely, and in ways that make their lives better.



TIM MURPHY
Chief Administrative Officer,
Mastercard

Americans continue to be wary of how much data smartphone apps collect, with many (83 percent) saying they will either not install apps or delete them if they think they collect too much data or do not protect data adequately. While many consumers (79 percent) adjust the permissions of their smartphone apps to restrict access to camera, location, or contacts when the app does not need them to function, fewer people are diligently updating their settings. A little less than half of consumers (47 percent) review security settings at least once every six months.

CONSUMER CONFIDENCE

Consumer Confidence That Personal Data, Such As Social Security Number, Health History, and Financial Information, Is Private and Not Distributed Without Their Knowledge	2023	2022
Very Confident	10%	7%
Somewhat Confident	46%	45%
Not Too Confident	31%	34%
Not Confident At All	13%	14%

Base: All Respondents

[May 2023 Consumer Reports nationally representative American Experiences Survey of 2,000 U.S. adults.](#)
[June 2022 Consumer Reports nationally representative American Experiences Survey of 2,103 U.S. adults.](#)



Behavior change occurs slowly. Even a slightly positive shift in consumer confidence is encouraging and supports the continued focus on awareness-raising efforts and the promotion of personal responsibility for data security.



DIANA BURLEY, PhD
Vice Provost for Research & Innovation, Professor, and Director of the Khan Institute
American University

With ongoing data breaches, stealthy online scams, and the rise of ransomware, many consumers are not confident that their personal data is kept private, but over 55 percent of them are at least somewhat confident that their personal data is private. Consumer confidence in securing personal data has stayed the same as it was in 2022.

Closing



Cyber Civil Defense Initiative

The Second Annual Consumer Cyber Readiness Report highlights two critical components that will drive behavior and attitude change. First, given the right information and awareness of safety issues, consumers make better decisions about reducing their risks online. Second, when industry and government work together to advocate for security-by-design of our products and policies, we can ensure that consumers have more trust and confidence when engaging online, and that they adopt tools or services that lead to improved cyber hygiene, thereby equipping themselves in the event of future threats. Taken together, improved awareness and collaboration to drive accountability and standards are critical in building consumer cybersecurity confidence, trust, and effective engagement online.

That said, we should not ask consumers to implement all security and privacy protections themselves. The most important measures should be built in by design and turned on by default. Higher default security standards in the software and hardware mean we can ask less of individual consumers. As much as we only ask drivers to drive safely and fasten their seatbelts, we need to ask people online only to surf safely and replace old devices and software.

The best news in this report is that consumers are focusing on things that matter most, especially use of stronger authentication and a second factor for logging on to sites and services, and updating their software and devices regularly. These are two of the most effective measures available to consumers, and they can have a significant effect.

Closing

” Consumers are gaining stronger cybersecurity skills, but threats to their safety and privacy are growing faster. While the burden should not fall on individuals alone, labeling initiatives and other tools that empower and educate are critical to improving the collective security of all consumers.



MARTA TELLADO
President and CEO,
Consumer Reports

” Since last year's report, regular data breaches and new technologies such as Generative AI have undoubtedly shaped perceptions of trust and cybersecurity in the digital world. As governments and industries around the world react to these shifts, it is important for consumers to implement basic cybersecurity protections and remain conscientious about what data they share online and how it might be used.



VIVIAN SCHILLER
Executive Director,
Aspen Digital

” To provide people with security and privacy online, we need to mostly stop trying to teach them to fish and instead give them food. We expect far too much from ordinary consumers. Nevertheless, increasing awareness of cybersecurity risks by consumers and action by them are of considerable value and importance, and I'm very pleased by the progress shown in this report. Hats off to Consumer Reports for conducting the survey.



PHILIP REITINGER
President and CEO,
Global Cyber Alliance

Thank You



Consumer Reports works to create a fair and just marketplace for all. As a mission-driven, independent, nonprofit member organization, Consumer Reports empowers and informs consumers, incentivizes corporations to act responsibly, and helps policymakers prioritize the rights and interests of consumers in order to shape a truly consumer-driven marketplace.



Aspen Digital empowers policymakers, civic organizations, companies, and the public to be responsible stewards of technology and media in the service of an informed, just, and equitable world. This program, part of the Aspen Institute, shines a light on urgent global issues across cybersecurity, the information ecosystem, emerging technology, the industry talent pipeline, tech and communications policy, and innovation. It then turns ideas to action and develops human solutions to these digital challenges.



The Global Cyber Alliance is an international nonprofit focused on delivering a secure, trustworthy internet that enables social and economic progress for all. The Global Cyber Alliance builds communities to deploy tools, services, and programs that provide cybersecurity at global scale.

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