

2023 REPORT

# Password Health Scores Around the World

The Password Health score uses Dashlane's unique methodology to provide insights into the state of password security across the globe.



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**In 2023, the global average<sup>1</sup> data breach cost was \$4.45 million, rising 15% over 3 years.**

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At the forefront of these breaches are social engineering attacks. Business Email Compromise (BEC) attacks doubled this year<sup>2</sup>, making up 50% of social engineering incidents, while ransomware remains prominent, accounting for 24% of social engineering incidents<sup>3</sup>. More than ever, it's critical for businesses and individuals to have a cybersecurity plan in place.

As we show in this report, credentials and passwords can be weak, strong, or very strong—the stronger your password health, the less likely you are to become a victim of cyberattacks.

Strong, unique passwords remain among the best defenses against breaches and attacks—80% of hacking-related breaches were caused by stolen credentials<sup>4</sup>, which can be attributed to weak, reused, or compromised passwords. It's time to increase your security awareness and use the latest tools to protect your personal and business data.

Our 2022 Global Password Health Report<sup>5</sup> found that the average Password Health score across all regions fell within the “Needs Improvement Range.” Adding to that, the average internet user has over 227 online accounts that require a password, giving threat actors ample opportunity to leverage attacks.

In this report, we share the global state of password health in 2023, determined by the Password Health scores in each region, as well as how our algorithm works and how to improve your score.

**Find out your Password Health score and what it means for your business.**

## Range of losses in 2023

For ransomware incidents reported to the FBI Internet Crime Complaint Center that resulted in financial losses, the cost to businesses is growing.



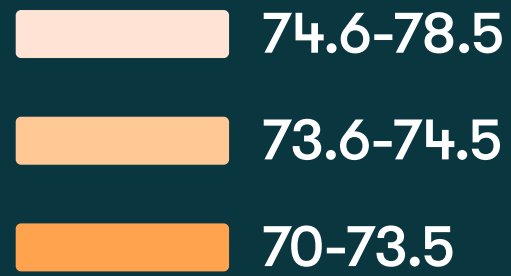
**\$2,500,000**

**95%**  
OF LOSSES

**\$1,000,000**

The 95% range of losses in 2023 was between \$1 million and \$2.25 million.<sup>6</sup>

1. IBM, “Cost of a Data Breach Report 2023,” 2023.
2. Verizon, “2023 Data Breach Investigations Report,” 2023.
3. Verizon, “2023 Data Breach Investigations Report - Summary of Findings,” 2023.
4. Verizon, “2022 Data Breach Investigations Report,” 2022.
5. Dashlane, “Global Password Health Score Report 2022,” 2022.
6. Verizon, “2023 Data Breach Investigations Report (DBIR),” 2023.



# Our findings

Our research revealed that in 2023, the average Password Health score for all regions was 74.2, with Northern America at the bottom and Eastern Europe at #1. All regions have improved their Password Health score by an average of almost 2 points from last year's report<sup>7</sup>, and all regions still fit within the "Needs Improvement" range. Take a look at the scores by region.

Regional key provided at the end of the report.



**74.2**

WAS THE AVERAGE PASSWORD HEALTH SCORE FOR ALL REGIONS

7. Dashlane, "Understanding Your Dashlane Password Health Score," 2020.

# Notable mentions



Strongest Password Health score:  
Eastern Europe



Lowest % of reused passwords:  
Northern Europe



Weakest Password Health score:  
Northern America



Highest % of reused passwords:  
Northern & Western Africa



Lowest % of compromised passwords:  
Northern & Western Africa



Most improved Password Health score:  
South Asia



Lowest % of weak passwords:  
South Asia



Highest % of compromised passwords:  
Northern America



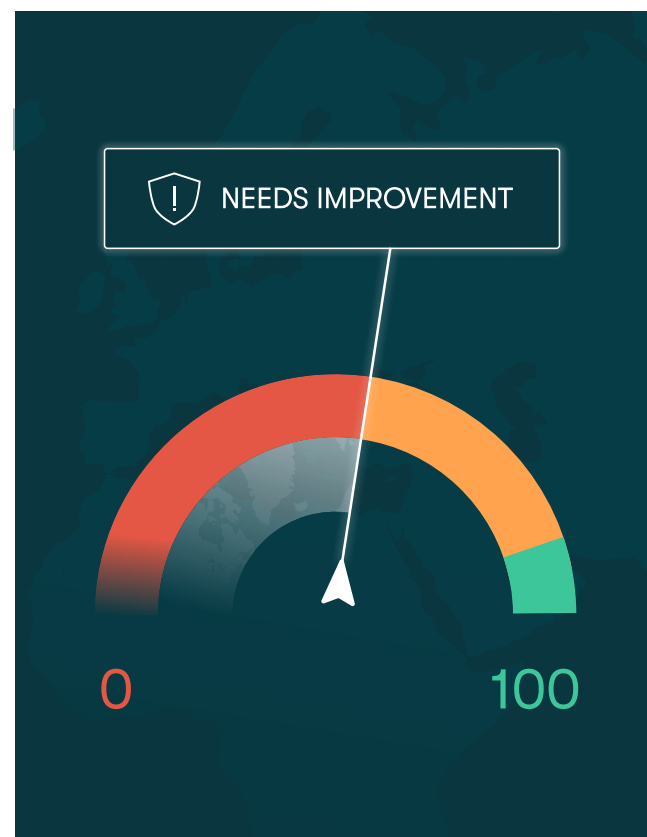
Least improved Password Health score:  
East Asia



Highest % of weak passwords:  
Northern America/Oceania



# The Password Health score explained



A score between 60 and 90 is classified as “Needs Improvement.”

Dashlane’s Password Health score algorithm enables users to measure and strengthen their overall password security. By identifying weak, reused, and compromised passwords, you can gain a holistic view of your password health and take direct action to secure your accounts and improve your score.

A score between 20 and 60 is classified as “Poor” and indicates a level of urgency for updating your passwords to ensure your information is protected. A score between 60 and 90 is classified as “Needs Improvement,” meaning you should take action to strengthen weak passwords and change compromised passwords. We’ve witnessed both personal and company-wide Password Health scores as high as 100, so we consider a score above 90 as “Strong” and the ideal level for businesses and individuals.

Region by score	Average score	Weak passwords	Reused passwords	Compromised passwords
#1 Eastern Europe	78.2 (+1.8)	8% (-3%)	48% (-3%)	11% (-2%)
#2 Northern Europe	76.1 (+1.8)	9% (-3%)	44% (-2%)	13% (-3%)
#3 Western Europe	75.2 (+1.8)	8% (-2%)	46% (-3%)	12% (-3%)
#4 Central America	74.9 (+1.9)	7% (-4%)	49% (-3%)	12% (-2%)
#5 Southern & Eastern Africa	74.4 (+2.1)	8% (-4%)	49% (-2%)	12% (-2%)
#6 South America	74.3 (+2.3)	9% (-6%)	53% (-3%)	12% (-2%)
#7 South-Eastern Asia	73.9 (+1.7)	8% (-3%)	50% (-2%)	12% (-2%)
#8 Oceania	73.7 (+2.3)	11% (-4%)	47% (-3%)	14% (-3%)
#9 Eastern Asia	73.6 (+1.5)	9% (-3%)	53% (-2%)	12% (-3%)
#10 Southern Europe	73.5 (+2.1)	9% (-4%)	53% (-2%)	14% (-2%)
#11 South Asia	73.5 (+2.4)	6% (-5%)	53% (-3%)	11% (-1%)
#12 Middle East & Central Asia	73.3 (+1.8)	9% (-5%)	53% (-2%)	13% (-3%)
#13 Northern & Western Africa	73.1 (+2.3)	7% (-6%)	54% (-2%)	9% (-2%)
#14 Northern America	70.9 (+1.8)	11% (-2%)	48% (-3%)	17% (-2%)

[Regional Key](#)

# The algorithm explained



## # of compromised passwords

Compromised passwords are those that have been exposed to or impacted by a data breach. Dashlane's Dark Web Monitoring tool constantly scans the dark web for exposed credentials and alerts you if any are compromised. The algorithm docks points for compromised passwords found by the tool as well as passwords identical or similar to those that are compromised.



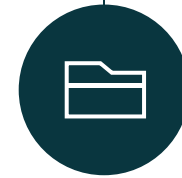
## # of reused passwords

Without unique passwords for each account, you run the risk of having multiple accounts compromised at once in the event of a breach. Your Password Health score decreases if you reuse passwords on different websites or have similar passwords for various logins. Cybercriminals may gain your credentials by automating brute-force attacks<sup>8</sup>, where they systematically try a vast number of username and password combinations, or credential stuffing<sup>9</sup>, where they leverage previously breached username and password pairs, testing them on different platforms until they gain unauthorized access.



## Password strength

Even unique or uncompromised passwords are vulnerable if they aren't strong. Strong passwords have 12 or more characters, a combination of numerals, letters, and symbols, and an unpredictable pattern without recognizable words or names. Dashlane uses the zxcvbn algorithm<sup>10</sup> to measure individual password strength and determine whether your passwords need improvement.



## Excluded passwords

Not all passwords are within the user's control, such as WiFi passwords or smartphone codes. These can be excluded from your Password Health score and stored securely in a separate tab in your Dashlane dashboard so as not to impact your score.

8. Dashlane, "What the Hack is a Brute Force Attack?" 2020.

9. Dashlane, "What is Credential Stuffing?" 2020.

10. Dashlane, "Dashlane's New ZXCVCN Guidance Helps You Create Stronger Master Passwords—And Eliminates the Guessing Game," 2020.

# Checklist for improving your password health

## ✓ Adopt the right password manager

Gain a complete picture of your password health with a password manager like Dashlane. Dashlane's Dark Web Monitoring feature audits all your logins and alerts you to any security vulnerabilities so you can address them immediately.

## ✓ Update reused or compromised passwords

Whenever you add a password to your vault, Dashlane will let you know if you've used the same password elsewhere and for which accounts. Update these to strong, unique passwords using our Password Generator. This tool is embedded in the web extension and mobile app and is easy to use anytime you save a new credential or need to update an existing one.



## ✓ Create a culture of security

Owning your data and privacy is critical for both businesses and individuals. Each non-compliant security incident can cost \$100,000, according to the Federal Trade Commission (FTC)<sup>11</sup>. Foster a culture of security<sup>12</sup> by sharing the importance of protecting sensitive data and enabling yourself and those around you with the right tools and information to make smart, critical decisions.

## ✓ Simplify security with the right tools

Take advantage of added layers of security available with Dashlane, including 2-factor authentication (2FA)<sup>13</sup> and single sign-on (SSO)<sup>14</sup>. Implementing these add-ons across the business makes it easier for everyone to keep company data and personal accounts secure. SSO makes it easier for IT admins to track extraneous logins and control access to company data. This is especially crucial when it comes to offboarding, as 83% of employees access work accounts after leaving a company.<sup>15</sup>

## ✓ Consider transitioning to passwordless

Dashlane now supports passkeys, a new technology allowing users to register and log in to websites without the need for a password. Dashlane can create and manage those passkeys for you. In 2021, 86% of organizations experienced bulk phishing attacks. Passwordless logins are resistant to phishing attacks and prevent cybercriminals from being able to guess your logins and access your accounts.

11. FTC, "Safeguards Rule," 2023.

12. Dashlane, "How to Create a Culture of Security," 2022.

13. Dashlane, "A Beginner's Guide to Two-Factor Authentication," 2022.

14. Dashlane, "SSO Technology Overview & Integration With Dashlane," 2022.

15. Beyond Identity, "Former Employees Admit to Using Continued Account Access to Harm Previous Employers," 2022.

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# Research methodology



To create this report, we computed regional scores using anonymous data from both business and personal Dashlane accounts and incorporated hundreds of billions of data points.

Password Health scores were determined for each region based on the average and median scores of Dashlane users within that region.

Dashlane took several factors into account to reduce bias:

All countries of the world have been included and grouped into key regions. We created distinct regions with a high enough volume of Dashlane users in each to ensure a consistent breakdown of business and individual users for each region.

Our analysis looked at the median and average scores, as well as the distribution of security scores across regions. Comparing the share of users with a high score in one region to that of another region, for example, demonstrated the nuances of security across regions. We determined the average score gave the most meaningful and digestible overview of the state of global password health.

When we looked at the data, we learned that the number of reused and weak passwords is similar globally, yet the amount of compromised passwords varies greatly by region. The latter contributes to the differences we observed in each region.







# Privacy & security



We do not and cannot know what information users store on the Services (“Secured Data”).

No “personal data” was collected for use in this report. As outlined in our Privacy Policy, Dashlane defines “personal data” as information that, either alone or when combined with other information we hold, identifies an individual, such as name, mailing address, email address, IP address, or telephone number.

All data collected for this report is anonymized and aggregated using IP address information without the last four digits to determine users’ location.

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**Dashlane employs zero-knowledge architecture in our platform.**

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Anonymous data means data that, alone or combined with other information available to us or a third party with whom the data is shared, does not permit the identification of an individual.

Get your Password Health score or your organization’s score by [downloading Dashlane for free](#).

**Learn more about how [Password Health scores](#) work and why they’re important.**

# References



1. IBM, "[Cost of a Data Breach Report 2023](#)," 2023.
2. Verizon, "[2023 Data Breach Investigations Report](#)," 2023.
3. Verizon, "[2023 Data Breach Investigations Report - Summary of Findings](#)," 2023.
4. Verizon, "[2022 Data Breach Investigations Report](#)," 2022.
5. Dashlane, "[Global Password Health Score Report 2022](#)," 2022.
6. Dashlane, "[Understanding Your Dashlane Password Health Score](#)," 2020.
7. Dashlane, "[Average Password Health Score by country](#)," 2022.
8. Dashlane, "[What the Hack is a Brute Force Attack?](#)" 2020.
9. Dashlane, "[What is Credential Stuffing?](#)" 2020.
10. Dashlane, "[Dashlane's New ZXCVCN Guidance Helps You Create Stronger Master Passwords— And Eliminates the Guessing Game](#)," 2020.
11. Dashlane, "[How to Create a Culture of Security](#)," 2022.
12. Dashlane, "[A Beginner's Guide to Two-Factor Authentication](#)," 2022.
13. Dashlane, "[SSO Technology Overview & Integration With Dashlane](#)," 2022.
14. FTC, "[Safeguards Rule](#)," 2023.
15. Beyond Identity, "[Former Employees Admit to Using Continued Account Access to Harm Previous Employers](#)," 2022.

# Regional key

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## #1 | 78.2 | Eastern Europe:

Bulgaria, Poland, Czechia, Ukraine, Moldova, Slovakia, Russian Federation, Romania, Hungary, and Belarus.

## #2 | 76.1 | Northern Europe:

Estonia, Denmark, Guernsey, United Kingdom of Great Britain and Northern Ireland, Isle of Man, Sweden, Iceland, Latvia, Jersey, Faroe Islands, Lithuania, Ireland, Finland, Norway, Svalbard and Jan Mayen, and Åland Islands.

## #3 | 75.2 | Western Europe:

Germany, France, Netherlands, Monaco, Switzerland, Belgium, Luxembourg, Austria, and Liechtenstein.

## #4 | 74.9 | Central America:

Costa Rica, Dominican Republic, Puerto Rico, Barbados, Martinique, Montserrat, Bonaire, Sint Eustatius and Saba, El Salvador, Belize, Saint Lucia, Cayman Islands, Anguilla, Guadeloupe, Panama, Virgin Islands (U.S.), Curaçao, Cuba, Saint Vincent and the Grenadines, Grenada, Bahamas, Honduras, Haiti, Trinidad and Tobago, Aruba, Jamaica, Saint Martin, Sint Maarten (Dutch part), Dominica, Mexico, Nicaragua, Guatemala, Antigua and Barbuda, Virgin Islands (British), Saint Barthélemy, Turks and Caicos Islands, Saint Kitts, and Nevis.

## #5 | 74.4 | Southern & Eastern Africa:

Zimbabwe, Réunion, Seychelles, Somalia, Kenya, Namibia, Mozambique, Zambia, Malawi, Eritrea, Mauritius, Madagascar, Comoros, South Sudan, Swaziland, Tanzania, United Republic of Botswana, Rwanda, Djibouti, Burundi, South Africa, Ethiopia, Mayotte, Lesotho, and Uganda.

## #6 | 74.3 | South America:

Guyana, Falkland Islands (Malvinas), Argentina, Venezuela (Bolivarian Republic of), Colombia, Ecuador, French Guiana, Suriname, Bolivia (Plurinational State of), Brazil, Chile, Uruguay, Paraguay, and Peru.

## Our findings

## #7 | 73.9 | South-Eastern Asia:

Philippines, Vietnam, Thailand, Brunei Darussalam, Lao People's Democratic Republic, Malaysia, Cambodia, Myanmar, Singapore, and Indonesia.

## #8 | 73.7 | Oceania:

French Polynesia, Fiji, Samoa, New Zealand, Tuvalu, Vanuatu, Northern Mariana Islands, Micronesia, Nauru, Pitcairn, New Caledonia, Wallis and Futuna, Solomon Islands, Tonga, Guam, Papua New Guinea, Tokelau, Cook Islands, Marshall Islands, Australia, American Samoa, and Palau.

## #9 | 73.6 | Eastern Asia:

China, Japan, Korea (Republic of), Macao, Korea (Democratic People's Republic of), Hong Kong, Taiwan, Province of China, and Mongolia.

## #10 | 73.5 | Southern Europe:

Portugal, Italy, Slovenia, Gibraltar, Greece, Croatia, Macedonia, Spain, Malta, Andorra, Bosnia and Herzegovina, San Marino, Serbia, Montenegro, Holy See, and Albania.

## #11 | 73.5 | Southern Asia:

India, Iran (Islamic Republic of), Nepal, Maldives, Afghanistan, Sri Lanka, Pakistan, Bhutan, and Bangladesh.

## #12 | 73.3 | Middle East & Central Asia:

Turkey, Oman, Uzbekistan, Kuwait, Kazakhstan, Azerbaijan, Yemen, Bahrain, Turkmenistan, Israel, United Arab Emirates, Armenia, Palestine State of Tajikistan, Cyprus, Jordan, Georgia, Qatar, Kyrgyzstan, Iraq, Syrian Arab Republic, Saudi Arabia, and Lebanon.

## #13 | 73.1 | Northern & Western Africa:

Morocco, Côte d'Ivoire, Libya, Senegal, Sierra Leone, Mali, Guinea-Bissau, Gabon, Cabo Verde, Ghana, Burkina Faso, Egypt, Congo (Democratic Republic of the), Angola, Equatorial Guinea, Sudan, Tunisia, Togo, Congo, Algeria, Nigeria, Niger, Benin, Guinea, Gambia, Western Sahara, Cameroon, Mauritania, Saint Helena, Ascension and Tristan da Cunha, Liberia, Central African Republic, Chad, Sao Tome, and Principe.

## #14 | 70.9 | Northern America:

Canada, Bermuda, Greenland, Saint Pierre and Miquelon, and United States of America.

# About Dashlane



Dashlane offers businesses and individuals a password management solution that is as easy to use as it is secure. Admins can easily onboard, offboard, and manage their employees with the assurance that company data is safe. And employees can enjoy a way to manage their work and personal accounts that's already loved by millions. Our team in Paris, New York, and Lisbon is united by our passion for improving the digital experience and the belief that with the right tools, we can help everyone realize the promise of the internet. Dashlane has empowered over 19 million users and 22,000 organizations in 180 countries to dash across the internet without compromising on security.

Visit [dashlane.com/blog](https://dashlane.com/blog) for more resources, digital security tips, and Dashlane product news.

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