

Protect your personal information

The privacy and security of your retirement plan account information are very important to Vanguard. To help ensure that your information is not compromised, you may want to consider taking advantage of the following security features:

- Security code authentication for logon. If you opt for this feature, you will receive a text message with an online security code when you attempt to log on to your Vanguard account. You can choose to receive the code each time you log on or only when logging on from an unrecognized device. You will need to enter this code online (in addition to your user name and password) in order to complete the logon process.
 - Log on to your account at vanguard.com/retirementplans
 - Click My Profile, then Overview, and select Security code under the Security preferences section. If you have multiple
 accounts at Vanguard, click Account Maintenance under the My Accounts tab on the personal investor site.
- Text message updates. You can opt to receive text messages regarding transaction status updates. With this service, Vanguard will send a text message at each step of certain transactions and when a transaction is complete. This way, you will be notified promptly of any unauthorized transactions.
- Enhanced phone security password. You may want to create an enhanced security password for your account. You will be asked for your enhanced security password each time you call the contact center.

Review your accounts regularly.	 Check your account frequently. Promptly and completely review all information we send to you via U.S. mail, email, and text. Vanguard will notify you when critical transactions are performed. Report any errors or discrepancies in your account and any suspected unauthorized transactions or account changes to Vanguard immediately by calling the contact center or sending an email to fraud@vanguard.com
Protect your vanguard.com user name, password, and other account-related information.	 Make sure your user name, password, and answers to your security questions are unique and strong. Passwords should contain at least eight characters and combine letters, numerals, and symbols. Avoid using the same user ID and password for your financial accounts as you do for other sites. Never share your user name, password, or other account-related information with anyone. Never store your user name, password, or answers to security questions in your browser. Clear any temporarily stored copies of online information by closing your browser after signing off. Do not leave your computer unattended while logged on to vanguard.com
Vary answers to security questions.	• Use caution when you select your Vanguard security questions and answers, as some information about you is readily available. An alternative is to answer the security questions with unique responses or code words. If you choose this option, make sure you'll remember your answers.
Protect your computer.	 Make certain that any computer you use to access vanguard.com has up-to-date security and antispyware, antivirus, and firewall software.

Additional security tips

Do not reply to email requests for personal or financial information.	 Do not respond to, open an attachment in, or click on a link within an email if you suspect the message is fraudulent. Vanguard will not ask for personal information such as your Social Security number, account numbers, or passwords in an email. If you can, check with the person who supposedly sent the message to make sure it's legitimate before opening any attachments. Just because an email message looks like it came from your
	daughter or boss does not mean that it did. Many criminals can "spoof" the return address, making it look like the message came from someone else.
Beware of phishing scams.	 If you receive an email advising you that there has been irregular activity on your Vanguard account and your profile has been locked, do not click on the link, reply, or call any phone number provided in the email. Vanguard does not send out unsolicited emails asking for personal information. Hover over the "from" email address or web link if you're suspicious. If it doesn't match a known legitimate address, it's likely fraud. Forward any suspicious phishing emails to phish@vanguard.com and indicate if you've clicked on any links within the email.
Protect your Social Security number.	• Don't carry your Social Security card in your wallet. Ask people or companies who ask for your Social Security number why they need it and how they plan to use it.
Shred all documents that contain personal information.	 Shred receipts, credit offers, credit applications, insurance forms, physician statements, checks, bank statements, and similar documents when you don't need them any longer, as well as expired credit cards.
Take caution when using public computers.	• Be cautious when using public computers (especially when traveling abroad and those found at libraries, internet cafés, and schools), or using shared ones, such as home computers. You don't know what may be installed on these computers. Public computers are traditionally on open networks and can be susceptible to monitoring without your knowledge.
Use wireless technology safely.	 If you have a wireless network at home, make sure to follow manufacturer's guidelines to secure your network. If you're not sure how, contact the manufacturer for assistance. Don't check your accounts over a public wireless internet connection.
Monitor your credit report.	 You are allowed a free credit report every year from each of the three credit reporting agencies listed below. By rotating the agencies, you could get a free credit report every four months. For more information, contact: Equifax: 800-525-6285 or visit equifax.com Experian: 888-397-3742 or visit experian.com TransUnion: 800-680-7289 or visit transunion.com Security freezes are also available and are designed to prevent credit reporting agencies from releasing your credit report without your consent. They will prevent things like new loans and credit from being approved under your Social Security number without your approval.

Learn more

For more information about how Vanguard is protecting your account and additional tips for safely conducting business online, please go to **vanguard.com/security**



Institutional Investor Group P.O. Box 2900 Valley Forge, PA 19482-2900

Connect with Vanguard[®] > institutional.vanguard.com

© 2017 The Vanguard Group, Inc. All rights reserved.

For institutional use only. Not for distribution to retail investors.

PHIRESP 052017