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Welcome

Thank You for Choosing Verizon Wireless

You're now connected to the power of America's most reliable wireless network. This guide will help you understand your new wireless device and all the things you can do with it at home or abroad. So let's get started.

For more details, please refer to the User Guides located on your installation CD.

The Basics Getting Started • VZ Access Manager Overview • Wireless Device Overview

THE BASICS

Just the basics; we'll get into the fun stuff later on.



- 1. USB Interface
- 2. Antenna Jack
- 3. LFD
- 4. Insert SIM Card

Installing the SIM Card*

Your GlobalAccess wireless devices comes with a SIM card installed which along with a Global Feature on your account, enables you to access data while outside the U.S. Should your SIM card be lost or damaged, please follow these instructions for the installation of your new SIM:

- 1. Remove SIM card from the outer card being careful not to touch the gold contacts.
- Insert SIM card into the slot by opening the SIM card cover located underneath USB modem. Hold the card so the writing on the back of the card is facing you and the gold contact points are properly aligned with the SIM card slot.
- **3.** Insert SIM card with the Verizon Wireless/Vodafone logo facing you into the slot.

The SIM card may remain in the wireless device permanently once installed (No need to remove).

[SPACE SHOULD BE LEFT TO INSERT AN IMAGE OF THE SIM BEING INSERTED INTO THE DEVICE (1" x 1" placeholder)]

NOTE: Should your SIM card be lost or damaged please call 1-800-922-0204 to speak with a Customer Service Representative. From outside the U.S. call +1-908-559-4899 for 24/7 Global Support.

*Your SIM (Subscriber Identity Module) card is a small rectangular plastic card that stores your phone number and important information about your wireless service.

CAUTION: Do not bend or scratch your SIM card. Avoid exposing your SIM card to static electricity, water or dirt.

VZAccess ManagerSM CD

Getting the most out of your wireless device couldn't be any easier than with the enclosed **VZ**Access Manager CD. By inserting the **VZ**Access Manager CD you will find all the software you need to get started and also learn all about setting up your Global**Access** wireless device. You'll be online and making the most out of your Global**Access** wireless device before you know it.

IMPORTANT: Prior to using Global**Access** service outside of the U.S., you must:

- Install VZAccess Manager GlobalAccess as provided with your VZAccess Manager CD.
- Activate service using your Mobile Broadband/ National Access wireless device.

VZAccess Manager Overview

VZAccess Manager is a powerful application tool designed to make piloting your remote office a breeze. It allows you to manage, monitor and customize your wireless network activity through an easy-to-use interface. VZAccess Manager also makes it easy to connect to the Internet or your corporate intranet, send email or TXT Messages* — virtually anything you can do using a land-based Internet connection. You'll also be able to time your network sessions, see the amount of data being transferred, view your usage history, connect to Verizon Wireless for product and account information, receive help and support, plus much more.

*TXT Messaging-capable device required.

Ways to Access

With **VZ**Access Manager, you can leave the office without leaving your broadband connection. With wireless Internet solutions such as Mobile Broadband, National**Access**, and Global**Access** along with Verizon Wireless devices or Mobile Office Kits, it's easier and faster than ever to stay connected.

Mobile Broadband — Need to leave the office but don't want to leave your broadband behind? With Verizon Wireless Mobile Broadband, you can work outside the office at broadband speeds. With access to America's most reliable broadband network, you can download complex files and view email attachments at typical speeds of 600 to 1400 Kbps (download) and 500 to 800 Kbps (upload).*

*Speed claim based on our network tests with 5 MB FTP data files without compression. Verizon Wireless is rapidly adding Rev. A capability to your Mobile Broadband service area. Your Mobile Broadband Rev. A-enabled device will indicate coverage when you are in a Mobile Broadband Rev. A service area. When outside the Rev. A service area, your wireless device will revert to Mobile Broadband Rev. O (typical download speeds will be 400–700 Kbps and upload speeds will be 60–80 Kbps) or NationalAccess coverage areas, where available. Actual throughput speed and coverage may vary. Speed claims not applicable when roaming.

 NationalAccess — NationalAccess is the Verizon Wireless national wireless Internet service. With the power of Verizon Wireless, users can browse the Internet and view email attachments and business applications from a notebook computer at typical speeds of 60 to 80 Kbps and bursts up to 144 Kbps.*

National Access is available in thousands of cities and towns across the nation.

*Speed claim based on our network tests with 101 kilobyte FTP data files. Actual throughput speed and coverage may vary. Speed claim not applicable when roaming.

 GlobalAccess — GlobalAccess, an extension of Mobile Broadband and NationalAccess, is a high-speed global remote access service, available in more than 135 destinations worldwide. Providing a secure notebook connection to the Internet, corporate Intranet and email abroad.

Supported Connection Types

- Mobile Broadband
- NationalAccess

THE BASICS

GlobalAccess*

VZAccess Manager Installation

Getting started with your new wireless device is simple. All you have to do is insert the installation CD into your notebook computer's CD-ROM drive. The Setup Wizard will guide you through the simple installation process and help you set up your user preferences. And with the new VZAccess Manager software automatically included with your installation, you'll find that your wireless device is just as easy to use as it is to install.

IMPORTANT: VZACCESS MANAGER SOFTWARE MUST BE INSTALLED BEFORE YOU INSERT THE WIRELESS DEVICE INTO THE NOTEBOOK COMPUTER FOR THE FIRST TIME. ONLY AFTER THE SOFTWARE HAS BEEN INSTALLED CORRECTLY CAN THE NOTEBOOK COMPUTER'S OPERATING SYSTEM SUCCESSFULLY DETECT AND CONFIGURE THE WIRELESS DEVICE.

IMPORTANT: Please wait until the Setup Wizard tells you to insert your wireless device. Inserting it at any other time may cause your wireless device to install incorrectly and fail to work properly on the network.

In most operating systems, the VZAccess Manager will launch automatically on your screen once the software is properly installed. (If the VZAccess Manager does not open automatically, you can launch it from your Start menu. Refer to User Guide for complete details.)

System Requirements

In order to set up **VZ**Access Manager, you will need the following minimum system requirements:

- Windows® 2000 Professional, or XP (Home, Professional or Tablet) and Window Vista
- Verizon Wireless device (PC Card, ExpressCard or USB Modem)
- Optional Wi-Fi adapter for Wi-Fi access
- Internet browser software for Internet access, or the software used by your company for network access
- Verizon Wireless data service
- One Type-A USB Port
- Memory (RAM): 32MB
- Hard Disk Space: 14MB
- CD-ROM

NOTE: Please wait until the Setup Wizard tells you to insert your wireless device. Inserting it at any other time may cause your device to install incorrectly and fail to work properly on the network.

^{*}SIM Card required. For more information, a complete list of coverage areas and network providers, visit verizonwireless.com/vzqlobal.

STEP 1: Install VZAccess Manager

THE BASICS

- Insert the installation CD into your notebook computer; the CD front end runs and presents you with several options. At this point, you can proceed with the VZAccess Manager setup or exit the setup process.
- Choose the "Install VZAccess Manager" option to begin the installation process. The VZAccess Manager installation program opens. Click "Next."
- A License Agreement dialog box appears. If you agree to be bound by it, click "I agree..." followed by "Next" to continue.
- It is recommended that you leave the default path as is and press "Next."
- **5.** Click "Next" to start the installation process.

After the files are copied to your notebook computer, the Installation Complete dialog box appears. When you press "Finish," **VZ**Access Manager automatically starts.

Note: On most computers, **VZ**Access Manager launches automatically on your screen once the software is properly installed. If **VZ**Access Manager does not open automatically, you can launch it from your "Start" menu. (Refer to the **VZ**Access Manager Software User Guide on your installation CD for complete details.)

STEP 2: VZAccess Manager Setup Wizard

- Launch VZAccess Manager from your notebook computer's programs/applications list, or from the desktop/dock, if you created a shortcut to VZAccess Manager.
- On the first run of VZAccess Manager, the Setup Wizard automatically launches. You are presented with a Welcome screen. Click "Next" to continue.

- 3. Specify the type of wireless device you intend to use with VZAccess Manager. Select either "Detect both Wi-Fi and WWAN" or "Detect WWAN device only." For the purposes of this guide, "Detect both Wi-Fi and WWAN" will be used. (Your experience in Step 4 may be different, depending on your selection.) Click "Next" to continue.
- 4. VZAccess Manager detects Wi-Fi adapters on your notebook computer. If your notebook computer has a built-in Wi-Fi adapter, proceed to Step 5. Otherwise, insert your Wi-Fi wireless device now and click "Next."

NOTE: Drivers for your Wi-Fi wireless device are required, if they are not installed on your computer.

- VZAccess Manager begins configuration for use of your wireless device on the wireless networks (Mobile Broadband/NationalAccess/GlobalAccess). Click "Next."
- Select "PC Card," "ExpressCard" or "USB Modem" and click "Next."
- Insert your wireless device (with the Verizon Wireless label facing up) when prompted by VZAccess Manager and click "Next."
- 8. VZAccess Manager attempts to complete configuration.
 - **A.** If the wireless device is detected, a screen appears stating that **VZ**Access Manager is configured to use the Verizon Wireless Modem. Click "Next" to continue and "Finish" to complete and exit the Setup Wizard.

B. If a screen appears stating that your wireless device is not activated yet, click "Activate" for the Over-The-Air (OTA) activation process to take place. Once activation is completed, click "Next" and "Finish" to complete and exit the Setup Wizard.

Outside of the U.S. and Canada

- **1.** Ensure **VZ**Access Manager and activation are complete per 'Getting Started' section prior to leaving the U.S.
- Insert Global Access wireless device together with SIM card.See section 'Installing the SIM Card'.
- 3. Launch **VZ**Access Manager, if not already running.
- A message appears to confirm ExpressCard. Click Yes.
 VZAccess Manager now searches for a network (may take a few minutes).
- Verify that you are in a suitable coverage area. Click 'Options' tab, select 'Test WWAN device'.
- 6. Select VZGlobal link in the Wireless Networks window. Double click on this or click Connect. The word 'Connected' appears at the bottom left of the VZAccess Manager window when a connection is established. If not within coverage, a 'No Service' message appears. Please ensure you are in a suitable coverage area. For other issues refer to the troubleshooting section of the VZAccess Manager User Guide.

Wireless Device Overview

With your new wireless device and your notebook computer, a wireless Internet connection is virtually always at your fingertips. Refer to the User Guide on the installation CD to see how easy it is to get connected.

Inserting Your Wireless Device

After you get your software up and running, open **VZ**Access Manager and you're ready to begin using your wireless device. Start by holding it along the edges and insert it into your notebook computer's USB port. If your wireless device comes equipped with an antenna, then fully extend the antenna. Your computer's operating system will signal that it's ready to make a network connection.

Establishing Connections

You're ready to take off once your wireless device is properly inserted. Launch VZAccess Manager by double-clicking the VZAccess Manager icon on your notebook computer's desktop. The VZAccess Manager application window displays the connection options. Select the connection: "Verizon Wireless — VZAccess." Then just click the "Connect" button when it becomes enabled. VZAccess Manager may take a moment to establish a connection, but will show a connection message when enabled.

Terminating Connections

Once you're connected, the "Connect" button will change to say, "Disconnect." To end your session, simply click this button. **VZ**Access Manager will return to its "ready" state.

IMPORTANT: Once you have inserted your wireless device, never attempt to remove it until you have terminated the connection. Doing so could damage your notebook computer.

Removing Your Wireless Device

After your session is over and you disconnect from the network, you're ready to safely remove your wireless device, until your next session. First, click on the **VZ**Access Manager icon in your computer's system tray and select "Exit" to completely exit the application. Then, click on the "Unplug/Eject Hardware" icon in the system tray and find the selection from the menu that matches your computer's operating system.

- Microsoft® Windows® 2000: Standard Open HSB USB Host Controller
- Microsoft® Windows® XP: Lucent USB Open Host Controller
- Microsoft Windows Vista: (XXXXXXXX)

After you select the appropriate operating system, a message will pop up on the screen to notify you that it is safe to remove the hardware. Click "OK." Now you can remove your wireless device, either by using your card-ejector tool (if available) or by gently gripping the device by the edges.



May We Help You?

Online Assistance

ASSISTANCE

Main website: verizonwireless.com

Other helpful websites and information:

verizonwireless.com/welcome

- Information on your wireless device, coverage, Calling Plan, billing and payment information
- FAQs, interactive demos for your wireless device and how to read your bill
- My Verizon registration for online account management

verizonwireless.com/myverizon Use My Verizon to:

- · Check your balance, minutes or make payments
- · Add or remove features
- · Reset Voice Mail passwords and more

verizonwireless.com/vzglobal

 Information on Global Phone, GlobalEmail, Global Travel Program, GlobalAccess, rates, destinations, and coverage.

The My Verizon Advantage

Get these added benefits for registering for My Verizon:

View your New Every Two® Meter.
 Sign in to My Verizon and click on My Services/My Phone to check your upgrade status and see if you are eligible for the New Every Two® discount.

- You can get a new wireless device every year with Annual Upgrade.
 - Sign up for a 2-year agreement on a Calling Plan of at least \$49.99 and you can purchase a new wireless device at its promotional price through My Verizon every year with a 2-year renewal (upgrade fee applies).
- If you're using more minutes than your Calling Plan includes, we'll let you know with Minute Check.
 Minute Check will periodically notify you through My Verizon if you're exceeding your plan allowance and let you know of other Calling Plan options that may save you money.

See **verizonwireless.com/myverizon** for details. Back-Up Assistant, Annual Upgrade and Minute Check are available for accounts with up to 10 lines that are enrolled in My Verizon.

verizonwireless.com/data

- Demos and tutorials on products and services
- Online technical support for products and services

Customer Service Assistance

Customer Service Representatives are also available at your local Verizon Wireless Communications Store during normal business hours. For Customer Service, call **1-800-922-0204** (toll-free in the U.S., 6am–11pm). If traveling outside the U.S., call **+ 1-908-559-4899** for 24/7 Global Support.

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ASSISTANCE

Address or Account Changes

It's important that we have your most current information so we're able to reach you for any reason. There are 3 ways to update your information:

- Online Go to verizonwireless.com/contactus and follow these instructions:
 - Select the appropriate choice from the drop-down menu in the "Send an Email" section.
 - 2. Fill out the online form.
 - 3. Select "Topic" and "Subtopic" from the drop-down menu.
 - 4. Hit "Send" to submit email.
- U.S. Mail Use the change-of-address form on the back of your bill.
- Telephone Call Customer Service at 1-800-922-0204 from any phone (toll-free in the U.S.) or *611 and SEND from your wireless device (airtime-free).

Billing Options

Your service comes with a streamlined bill that you'll receive each month at no additional cost. Your bill includes all applicable charges, but will not contain any call details (e.g., date, time, and wireless device number called).

Detailed Billing

Call details are available for free online at **verizonwireless. com** under My Verizon. A monthly fee applies to receive call details on your paper bill.

Going Paperless

You have the option of eliminating your paper bill and receiving bill notification via email. To eliminate your paper statement, or to make manual or automatic bill payments, register for My Verizon at **verizonwireless.com/myverizon** and then select the quick link under the "Billing" tab for "Go Paperless."

Paying your Bill

Verizon Wireless gives you several convenient options to pay and manage your monthly bill. Some of those options are:

- At verizonwireless.com/myverizon Make one-time or recurring payments using your debit card, credit card, ATM card, electronic check/ACH or enroll in our Auto Pay Program.
- With the Auto Pay Program Allows you to choose to have automatic payment deductions taken from your bank account. To enroll, you can fill out the back of your remittance slip and mail it in, call 1-866-868-3882, or log on to verizonwireless.com/myverizon.
- By calling from your wireless device Press #768 and SEND and follow the prompts to enter your payment information.

ASSISTANCE

- Using My Verizon from your wireless device Make
 a one-time payment by credit card, debit card, and/or
 electronic check directly from your wireless device as
 long as your wireless device is Mobile Web-capable.* To
 make a payment, simply launch your web browser, then
 select "My Verizon." If you don't subscribe to Mobile Web,
 you will see an option to view My Verizon for free once
 you launch the browser.
- Home banking Verizon Wireless and CheckFree®
 have teamed together to give you the option to pay your
 wireless bill online at your choice of more than 1,700
 financial services locations across the Internet. You will
 be able to schedule payments using a designated bank
 account and arrange for monthly bill payments via your
 preferred home-banking service provider.
- Check payment via mail Allows you to mail in a
 personal or business check, along with the remittance slip
 and envelope provided with your billing statement.
- In person Payments can be made at your local Verizon Wireless Communications Store using our Bill Payment Kiosks.

Loss or Theft

If your wireless device is lost or stolen, please contact
Customer Service at **1-800-922-0204** to suspend your service.
From outside the U.S., call + **1-908-559-4899**. If your wireless

device is malfunctioning, please bring it to a Verizon Wireless Communications Store.

Toll-free Calls and Emergency Services

Calls to 800, 855, 866, 877 and 888 numbers are toll-free, but airtime charges do apply. Calls to Verizon Wireless Customer Service and emergency calls (911) are toll- and airtime-free.

Fraud Prevention

Verizon Wireless wants to protect your privacy and works hard to prevent unauthorized phone usage or fraud. Wireless device numbers and calls are capable of being intercepted by someone with specialized equipment. We use antifraud technology to make fraudulent calling very difficult, particularly on digital calls.

- Report a lost or stolen wireless device to the police and Verizon Wireless immediately.
- Never leave your wireless device unattended, especially in your office or car.
- When not in use, lock the wireless device using your lock code.
- Review your bill and report any suspicious calling activity.
 If we conclude that the calls are fraudulent, you will not be held responsible for the charges.
- Record your wireless device's electronic serial number in the back of this guide and keep it safe.

^{*}See Wireless Device User Guide for details.

Have your wireless device serviced only at a Verizon
Wireless Communications Store or by an Authorized Agent,
retailer, manufacturer's service center or other repair
center.

Assistive Communication Devices

TTY (Text Telephony) and TDD (Telecommunications Device for the Deaf) allow individuals who are deaf, hard of hearing, or have speech or language disabilities to communicate by telephone.

When a user types his or her conversation on a TTY keyboard, it is transmitted as tones through the telephone. Tones are received by the other person's TTY, translated into text and displayed on the screen. In order to use the TTY network, you must have a TTY-compatible phone and be in the TTY mode to place or receive calls. Note that most digital wireless devices are TTY-compatible.



Optional Services

Work wirelessly. Protect your wireless device against damage or, even more importantly, protect yourself on the road. You can find it all in Verizon Wireless plan enhancements. Call **1-800-922-0204** or speak to your Verizon Wireless Sales Representative to find out more. Or just visit **verizonwireless.com**.

Safety and protection

OPTIONAL SERVICES

Roadside Assistance — Roadside Assistance can provide you with emergency roadside services anywhere in the United States and Canada, 24 hours a day, 365 days a year. You may sign up for this feature on MyVerizon or by calling Verizon Wireless directly.

Equipment protection

Receive total protection for your wireless device and limited accessories. If your wireless device is lost, stolen, damaged or malfunctioning — you're covered. Just choose a service plan that's right for you (must be added within 15 days of activation or upgrade):

- Total Equipment Coverage
- Asurion Wireless Protection
- Extended Warranty

NOTE: Insurance offered by third-party providers.

International services

 International Long Distance - You can call over 190 destinations from the U.S. with your Verizon Wireless phone.

- Simply add IDIAL to your account and for reduced rates, select our International Long Distance Value Plan for. Or for occasional international calls, use our Per-Minute Rates.
- International Text Messaging You can text message non-U.S. numbers of participating carriers with no additional setup required. These text messages do not count against your text messaging monthly bundled allowances.
- International Roaming Traveling outside of the US? With your Verizon Wireless device you can stay connected in over 40 destinations including, Canada, Mexico, China, Israel, Brazil and Jamaica. Dial *611 from your phone or call (800) 899-4249 and speak with a Verizon Wireless representative to enable International Roaming. A full list of destinations and rates can be found at www.verizonwireless.com/internationalroam.
- Global Travel Program Available in over 200 destinations, this is the perfect short-term solution for the occasional or infrequent global traveler who needs to stay in touch when travelling internationally to GSM locations. This program is ideal when your travel duration is less than 21 days. There are no rental fees or security deposit, and all charges will be applied to your current Verizon Wireless Bill. For more information on the Global Travel Program, visit verizonwireless.com/globaltravel. To place an order, contact our Gloal Services Activation Specialists at 1.800.711.8300.

Optional Services

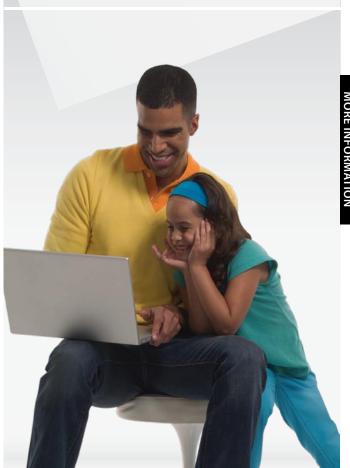
For Up-To-Date Information on destinations and rates, please visit verizonwireless.com/vzglobal and select International Long Distance, International Text Messaging, International Roaming, or Occasional Global Traveler to see additional details on what services and programs are available with your Verizon Wireless device.

Other products and services

Whether it's business or personal, Verizon Wireless offers a variety of wireless solutions for your notebooks, Personal Digital Assistants (PDAs) and/or Smartphones.

- **Office Message Alert** When a Voice Mail is left on your office phone's Voice Mail, a Text Alert is sent to your wireless device.
- **Wireless Sync** Allows synchronization of your email, calendar, contacts, etc., between your office computer and your Verizon Wireless device.
- **VZAccess** PC Card, ExpressCard or USB Modem that allows you to download files, open email attachments, access office data and applications, and browse the Internet.

More Information



How Wireless Works

MORE INFORMATION

Your wireless service is different from your home or business phone service. On a wireless device, you must press the SEND button to alert the network to connect your call. Unlike the calls you make on a home or business phone, wireless communications travel over the air and can react to the environment. Rain, snow, fog, falling leaves, water, mountains, canyons and even buildings may affect service. All wireless service is subject to "dead zones," or no-coverage areas.

Verizon Wireless Network Technology

Verizon Wireless offers CDMA (Code Division Multiple Access) digital network technology to most of its customers. CDMA digital technology offers many benefits compared to analog, such as less static, enhanced voice clarity, increased privacy and longer battery life. A CDMA digital phone is necessary to subscribe to our digital service. Verizon Wireless only sells digital wireless devices that are E911 compatible and either all-digital or tri-mode, which means you may use analog or CDMA digital services on different frequencies.

Worry Free Guarantee®

Subject to the Customer Agreement and Calling Plan.
Please read and understand them before activating.
Verizon Wireless calling areas, rates, coverage, agreements, provisions, business practices, procedures and policies are subject to change as specified in the Customer Agreement.
Our liability is significantly limited.

Certain conditions and restrictions apply. For complete details on the Worry Free Gurantee, visit verizonwireless. com. Best network claim based on our reliability studies. See verizonwireless.com/bestnetwork for details.

Security Deposit

You may have been asked to leave a security deposit at the time you activated your wireless service. You are eligible to receive your security deposit back at the end of 1 year of uninterrupted service, or upon termination of your contract. You will automatically be refunded your deposit after 1 year, including interest, provided that you have kept your account in "good standing" (this means that you paid your bill continuously for one year in a timely manner). This refund may take up to 3 billing cycles to be processed. Should you be disconnected at any time during the first year for lack of payment, you forfeit any interest accrued during that time frame. If you terminate your service, but have not paid your final bill, the deposit will be applied to your account, and you will receive any remaining funds. If your service is terminated

MORE INFORMATION

after the initial 30-day Worry Free Guarantee period but before the end of your minimum term, your deposit will be applied against the \$175 early termination fee in addition to any outstanding balance before a check is processed.

Federal Communications Commission (FCC) Rules and Regulations

The FCC requires that wireless devices be operated in accordance with FCC rules and regulations and under supervision of the licensee. Severe punishment can result from failure to comply with the following regulations:

- No person shall knowingly utter or transmit any false or fraudulent signal or distress communication.
- No person shall willfully or maliciously interfere with, or cause interference to, any radio communication or signal.
- It is unlawful to "listen in" on conversations intended for others or to divulge any information thereby obtained.
- No person shall utter any obscene, indecent or profane language by means of radio communication.

National Do Not Call Registry

Protect yourself from unwanted calls with the National Do Not Call Registry Program.

- FCC regulations prohibit telemarketers from using automated dialers to call wireless numbers.
- Personal wireless device users can add their wireless numbers to the National Do Not Call Registry.
- The federal government does not maintain a national wireless device registry.

You can register by either of the following methods:

- By wireless device: 1-888-382-1222 from the number you wish to register.
- 2. Online at: www.donotcall.gov.

Your registration becomes effective within 31 days of signing up and is active for five years. There is no cutoff date or deadline for registering.

Radio Frequency Emissions

Your wireless device, which contains a radio transmitter and receiver, emits radio frequency energy during use. The following consumer information addresses commonly asked questions about the health effects of wireless devices.

Are wireless devices safe?

MORE INFORMATION

Scientific research on the subject of wireless devices and radio frequency ("RF") energy has been conducted worldwide for many years, and continues. In the United States, the Food and Drug Administration ("FDA") and the Federal Communications Commission ("FCC") set policies and procedures for wireless devices. The FDA issued a website publication on health issues related to cell phone usage where it states, "The scientific community at large ... believes that the weight of scientific evidence does not show an association between exposure to radiofrequency (RF) from cell phones and adverse health outcomes. Still the scientific community does recommend conducting additional research to address gaps in knowledge. That research is being conducted around the world and FDA continues to monitor developments in this field." You can access the FDA website at http://www.fda.gov/cellphones. You can also contact the FDA toll-free at (888) 463-6332 or (888) INFO-FDA. The FCC issued its own website publication stating that "[t]here is no scientific evidence that proves that wireless telephone usage can lead to cancer or other problems, including headaches, dizziness or memory loss."

This publication is available at http://www.fcc.gov/cgb/consumerfacts/mobilephone.html or through the FCC at (888) 225-5322 or (888) CALL-FCC. The National Cancer Institute ("NCI") states that concerns about the potential health effects of using cellular phones – "and specifically the

suggestion that using a cell phone may increase a person's risk of developing brain cancer – are not supported by a growing body of research on the subject." You can access NCI's review of the research at http://www.cancer.gov/ncicancerbulletin/NCI_Cancer_Bulletin_092308/page7.

What does Specific Absorption Rate (SAR) mean?

In 1996, the FCC, working with the FDA, the U.S. Environmental Protection Agency (EPA) and other agencies, established RF exposure safety guidelines for wireless devices in the United States. Before a wireless device model is available for sale to the public, it must be tested by the manufacturer and certified to the FCC that it does not exceed limits established by the FCC.

One of these limits is expressed as a Specific Absorption Rate, or "SAR." SAR is a measure of the rate of absorption of RF energy in the body. Tests for SAR are conducted with the wireless device transmitting at its highest power level in all tested frequency bands. Since 1996, the FCC has required that the SAR of handheld wireless devices not exceed 1.6 watts per kilogram, averaged over one gram of tissue. Although the SAR is determined at the highest power level, the actual SAR value of a wireless device while operating can be less than the reported SAR value. This is because the SAR value may vary from call to call, depending on factors such as proximity to a cell site, the proximity of the wireless device to the body while in use, and the use of hands-free devices.

For more information about SARs, see the FCC's OET Bulletins 56 and 65 at www.fcc.gov/Bureaus/Engineering Technology/Documents/bulletins, www.fcc.gov/oet/ea. You may also wish to contact the manufacturer of your wireless device.

Can I minimize my RF exposure?

MORE INFORMATION

If you are concerned about RF, there are several simple steps you can take to minimize your RF exposure. You can, of course, reduce your talk time. You can place more distance between your body and the source of the RF, as the exposure level drops off dramatically with distance. The FDA/FCC website states that "[h]ands-free kits can be used with wireless devices for convenience and comfort. These systems reduce absorption of RF energy in the head because the phone, which is a source of the RF emissions, will not be placed against the head. On the other hand, if the phone is mounted against the waist or other part of the body during use, then that part of the body will absorb more RF energy. Wireless phones marketed in the U.S. are required to meet safety requirements regardless of whether they are used against the head or against the body. Either configuration should result in compliance with the safety limit."

Also, if you use your wireless device while in a car, you can use a wireless device with an antenna on the outside of the vehicle. You should also read and follow your wireless device manufacturer's instructions for the safe operation of your wireless device.

Do wireless devices pose any special risks to children?

The FDA website states that "[t]he scientific evidence does not show a danger to any users of cell phones from RF exposure, including children and teenagers." The FDA website further states that "[s]ome groups sponsored by other national governments have advised that children be discouraged from using cell phones at all. For example, the Stewart Report from the United Kingdom ["UK"] made such a recommendation in December 2000. In this report a group of independent experts noted that no evidence exists that using a cell phone causes brain tumors or other ill effects. [The UK's] recommendation to limit cell phone use by children was strictly precautionary; it was not based on scientific evidence that any health hazard exists." A copy of the UK's leaflet is available at http://www.dh.gov.uk (search "mobile"), or you can write to: NRPB, Chilton, Didcot, Oxon OX11 0RQ, United Kingdom. Copies of UK's annual reports on mobile phones and RF are available online at http://www.iegmp.org.uk and http://www.hpa.org.uk/radiation/ (search "mobile"). Parents who wish to reduce their children's RF exposure may choose to restrict their children's wireless device use.

Where can I obtain further information?

For further information, see the following additional resources (websites current as of April 2005).

U.S. Food and Drug Administration

FDA Consumer Magazine,

November-December 2000

Telephone: 1-888-INFO-FDA

www.fda.gov/fdac/features/2000/

600_phone.html

MORE INFORMATION

American National Standards Institute

1819 L Street, N.W., Suite 600, Washington, D.C. 20036

Telephone: 1-202-293-8020

www.ansi.org

Implantable Medical Devices

A minimum separation of six (6) inches should be maintained between a wireless phone and an implantable medical device, such as a pacemaker or implantable cardioverter defibrillator, to avoid potential interference with the device. Persons **who have** such devices:

- Should ALWAYS keep the wireless phone more than six (6) inches from their implantable medical device when the wireless phone is turned ON;
- Should not carry the wireless phone in a breast pocket;
- Should use the ear opposite the implantable medical device to minimize the potential for interference;
- Should turn the wireless phone OFF immediately if there is any reason to suspect that interference is taking place.
- Should read and follow the directions from the manufacturer of your implantable medical device.

If you have any questions about using your wireless phone with such a device, consult your health care provider.

For additional information, see www.fda.gov/cellphones/.

Caution: Avoid Potential Hearing Loss

MORE INFORMATION

Prolonged exposure to loud sounds (including music) is the most common cause of preventable hearing loss. Some scientific research suggests that using portable audio devices, such as portable music players and cellular telephones, at high volume settings for long durations, may lead to permanent noise-induced hearing loss. This includes the use of headphones (including headsets, earbuds, and Bluetooth® or other wireless devices). Exposure to very loud sound has also been associated in some studies with tinnitus (a ringing in the ear), hypersensitivity to sound, and distorted hearing. Individual susceptibility to noise-induced hearing loss and other potential hearing problems varies.

The amount of sound produced by a portable audio device varies depending on the nature of the sound, the device, the device settings, and the headphones. You should follow some commonsense recommendations when using any portable audio device:

- Set the volume in a quiet environment and select the lowest volume at which you can hear adequately.
- When using headphones, turn the volume down if you cannot hear the people speaking near you or if the person sitting next to you can hear what you are listening to.
- Do not turn the volume up to block out noisy surroundings.
 If you choose to listen to your portable device in a noisy environment, use noise-cancelling headphones to block out background environmental noise.
- Limit the amount of time you listen. As the volume increases, less time is required before your hearing could be affected.
- Avoid using headphones after exposure to extremely loud noises, such as rock concerts, that might cause temporary hearing loss. Temporary hearing loss might cause unsafe volumes to sound normal.
- Do not listen at any volume that causes you discomfort. If you experience ringing in your ears, hear muffled speech or experience any temporary hearing difficulty after listening to your portable audio device, discontinue use, and consult your doctor.

You can obtain additional information on this subject from the following sources:

American Academy of Audiology

11730 Plaza American Drive, Suite 300

Reston, VA 20190

MORE INFORMATION

Voice: **(800) 222-2336** Email: info@audiology.org

Internet: www.audiology.org

National Institute on Deafness and Other

Communication Disorders National Institutes of Health 31 Center Drive, MSC 2320

Bethesda, MD USA 20892-2320

Voice: (301) 496-7243 Email: nidcdinfo@nih.gov

Internet: www.nidcd.nih.gov/health/hearing

National Institute for Occupational Safety and Health

Hubert H. Humphrey Bldg. 200 Independence Ave., SW

Washington, DC 20201

Voice: 1 800 CDC INFO (1 800 232 4636)

Internet: www.cdc.gov/niosh/topics/noise/default.html

Drive Responsibly

When behind the wheel, safe driving is your responsibility and it should always be your first priority.

Scientific research on the subject of wireless phone use and driving has been conducted worldwide for several years.

According to the National Highway Traffic Safety Administration (NHTSA), the available research indicates that using a wireless phone while driving degrades a driver's performance, whether it is a hands-free or hand-held wireless phone. NHTSA advises that the "safest course of action is to refrain from using a cell phone while driving." NHTSA's policy on "Cell Phone Use While Driving," as well as Frequently Asked Questions on the subject, are available at www.nhtsa.gov (click on "Traffic Safety" then on "Drowsy and Distracted Driving").

For your well being and the well being of those around you, you should consider turning your phone off and allowing calls to go to Voice Mail while you are driving.

If you choose to use your wireless phone while driving, several jurisdictions have adopted "hands-free" and other restrictions on the use of wireless devices while driving. It is your responsibility to know and to comply with the law in your area.