

## SPYWARE

Increasingly, the Internet is a dangerous place. As many New Yorkers know all too well, computer users can unknowingly download programs (called "spyware") that monitor their surfing habits, deliver annoying advertisements and even steal their personal information—just by surfing the Internet. In fact, you may have spyware on your computer and not even know it—slow performance, a barrage of pop-up ads, and change in your homepage are all clues that you may have spyware on your system. A recent study by the U.S. National Cyber Security Alliance showed that over 80% of all Internet users were infected with at least one spyware program, and often many more. And while pop-ads are certainly distracting, some spyware also has the ability to delete files on your computer, send information about you back to the spyware company or render your computer completely inoperable.

Fortunately, there are a number of simple steps you can take to protect you and your family from the scourge of spyware. The Attorney General recommends the following:

\* **Be careful what you download!** Many seemingly innocuous programs you find on the web—such as screensavers, file-trading programs and games—are bundled with malicious spyware that bombards you with pop-up ads and offers. Usually, these programs are offered for "free," but may not disclose that they come bundled with spyware. Even programs which purport to protect you from spyware or pop-up ads may contain these sorts of programs. Always be very wary about downloading any program from the Internet—especially if you do not know or trust the source.

\* **Update your operating system and browser.** Even if you only surf the web and don't download any files, you are susceptible to spyware that exploits security holes in your operating system and browser. Most spyware programs are written for users of Microsoft Windows and Microsoft Internet Explorer. Microsoft periodically updates this software with free "patches"—program updates that are designed to fix specific vulnerabilities that spyware writers abuse. Even if you do not have the most recent version of Windows, Microsoft generally offers free updates for all its operating systems for critical problems.

You should regularly check the Microsoft website for these updates at:  
<http://update.microsoft.com>

\* **Check your security settings.** One way that spyware vendors sneak their product onto your computers is by taking advantage of low security settings on Internet Explorer. Check your security level by clicking Tools --> Internet Options on Internet Explorer and then clicking the Security tab. Make sure that your security level is at least Medium. You may also want to customize your security settings by increasing the security level for—or even disabling—ActiveX controls and Javascript. ActiveX and Javascript are two tools that web programmers use to make web pages more dynamic and interactive; unfortunately, they are also easy tools for spyware writers to use to infiltrate your system. At the very least, make sure that your security settings do not run unsigned ActiveX controls, and that even signed ActiveX controls "prompt" you for consent before being run.

\* **Do not consent to sudden prompts!** Many times when you surf the Internet, you will suddenly be confronted with a dialog box asking your consent to run some sort of program or install some sort of update. Often, these prompts will be designed to look like they were issued by your own computer, or your own software. Most of the time, these are illegitimate attempts to get you to download spyware! Say no—or better yet, close the box by clicking the x in the upper right hand corner.

Sometimes, a web site will ask you to download Macromedia Flash or Shockwave in order to properly view a site. These are perfectly safe technologies and can make your web experience more enjoyable. You can download reader at: <https://get.adobe.com/reader/>

\* **Clean your computer using anti-spyware software.** Although many advertised "spyware cleaners" and "pop-up blockers" are scams designed to get you to download more spyware onto your computer, there are a number of legitimate—and often free—services out there. Two such programs are Ad-Aware and Spybot—Search and Destroy. Both these programs are free and easy to download. Make sure to run both programs often, and make sure you use the "update" feature on both to make sure your software has the most recent information about malicious programs on the Web.

For Ad-Aware, visit the Lavasoft website at:  
<http://www.lavasoftusa.com/software/adaware/>

For Spybot—Search and Destroy, go to:  
<http://www.safer-networking.org/en/index.html>

\* **Install a firewall.** Firewalls aren't just for big corporations—they are becoming increasingly vital for home users as well. Basically, a firewall is a program that monitors information going to and from your computer. It checks to make sure that illegitimate programs don't get uploaded to your computer, and that programs on your computer aren't secretly sending information about you to others. Many Internet service providers also offer firewall software to protect home users, and there are a number of products commercially available and easy to install. There are also a number of free programs available. Newer versions of most operating systems (such as Windows XP and Windows Vista) also have firewall programs you can use.

\* **Talk to your kids and family members.** What good is following all these steps yourself if your teenager downloads a free racing game laced with all sorts of spyware programs? Talk to your family—or anyone else who shares your computer—to make sure that they too understand the threat that spyware poses and how they can protect themselves.

\* **Which browser?** Finally, you may decide to consider switching web browsers. Because Internet Explorer users constitute well over 80% of the market, spyware writers tend to write programs that specifically target those users. The open-source, nonprofit company Mozilla offers its Firefox web browser that may help you avoid many spyware programs that only work on Microsoft's Internet Explorer. Keep in mind, however, that some Internet pages may display differently on non-Microsoft browsers, and some (though few) may not display at all. You should continue to use Microsoft's Internet Explorer for these pages, such as the Microsoft

update page (mentioned above), which you can only view using Internet Explorer. You can download Firefox at <http://www.mozilla.com/firefox/>

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