

SAFE COMPUTING/E-MAIL/WEBSITE TIPS @ POBCSD

Here, There, and Everywhere:

The Human Nature of a Computer Virus and Best Prevention Practices

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The purpose of this article is to discuss the uncanny human nature of computer viruses and recommend best practices on how to avoid them from infecting a computer device/drive. In general, analogous to any human virus (cold or flu, for example), the potential of coming in contact with another individual and becoming susceptible to getting sick is everywhere - the store, bus, car, mall, workplace, doctor's office, home, and/or even by the simple act of stepping out doors, on what appears to be a beautiful day, and walking down a public street. As human beings, we logically try to avoid getting sick by politely keeping our distance from others who may not feel/look well or from someone who may sneeze or have a runny nose, etc.; ***however, the reality is that we still need to interact with people on a daily basis and the potential of contracting a cold or flu is always Here, There, and Everywhere*** (to conveniently borrow a quote from a memorable Beatles song).

The reality of the situation is that no matter how we may try to avoid a virus by following best preventative practices such as eating right, maintaining a healthy immune system, getting a flu vaccine, not touching anything or anyone, taking extra Vitamin C, etc. – *the potential risk of still getting sick is always here, there, and everywhere*. For example, even if we choose to get a flu vaccine/shot as a recommended best practice preventative measure, there is always another new variant or strain of the flu virus that may not have been addressed in the vaccine/flu shot we may have just received. Moreover, even if we go to the extreme and decide the very best preventive measure against contracting a virus is to hide inside our homes behind closed doors (not a realistic option as we all know); the reality and fact of the matter is we can still get sick from a virus in some way, shape, or form from another family member/friend coming into our sanctuary from the outside world.

And so, analogous to our ever-evolving digital-centric world, the same human nature potential for contracting viruses inherently exists in the virtual climate our 21st century digital-reliant world has created with computers, E-mail, Websites, Social Networking and any other type of shared media or content. Computer viruses/worms/Trojans/malware/spyware, etc., as they have collectively become to be known as, are spread in the same manner as human viruses; through shared contact and exposure. In general, a computer can contract a virus via contact between a *purposefully infected Website; a spoofed advertisement web-link that invitingly lures you in to click on it; an innocent looking joke-type web-link/image/video and/or E-mail attachment; a malicious computer application; an embedded E-mail/Social Network link, and/or any other type of executable file download/document/shared media/CD/DVD/Flash Drive, etc.*

Best recommended computer virus prevention practice has always been and continues to be to maintain an updated antivirus/multithreat type solution for all of your computer related devices in addition to diligently scanning and maintaining all related computer media/mobile drives and applying recommended updated computer security patches and firewall settings. For maintaining the ongoing safety of all personal computer devices, I continue to highly recommend that you personally contact a reliable antivirus/multithreat vendor and/or technical support service center to help ensure you are getting the best protection for all of your computer related devices. In general, a good antivirus solution for your computer is one that updates itself and regularly scans your computer with the latest antivirus/multithreat type definitions (vaccines) on a "real-time" basis so as to keep it from becoming infected while also providing a potential cure in the unfortunate event your computer becomes infected. These best practices will stop and/or cure most virus/worm/Trojan/malware/spyware attacks from infecting your computer from any type of entry. However, it is important to note, just like the latest and

greatest human flu vaccine is only as good as protecting humans from the variant of the virus it was created to protect us from – the same theory holds true with all computer antivirus software solutions; ***your computer still has the potential of contracting a virus as long as it is plugged in, turned on, and being used with any type of shared media you may decide to introduce to it from any infected source.***

Like other large organizations, our school district hosts over 5,000 users on any given day using over 2,000 district-wide wired and wireless computers/mobile devices in addition to being exposed to thousands of additional non-district computing devices *via shared media originating from personal home computers, across the world/Internet/Web, E-mail, and literally hundreds-of-thousands of potentially infected Website links and downloads per day.* To protect our district-wide networks we utilize the same recommended best practices – but on a much larger and complex enterprise scale. As one may imagine, this is a full-time job in itself amongst the other critical responsibilities, security, and productivity our district has the responsibility of maintaining on a 24/7 basis in order to effectively support the ongoing digital-driven operations of our highly complex designed networks. In result, as we continue to focus our ongoing daily efforts toward maintaining **“priority one” – the integrity of our network** – whenever it is deemed necessary, other district-wide services, such as Internet bandwidth for example, are sometimes temporarily reduced and/or suspended. Unfortunately, this can also create a domino-effect of other loss of normal services negatively impacting our response time in addressing other previously submitted classroom and administrative office repair requests and technology initiatives and implementations.

In the event of these circumstances, as past practice, the district continues to make every effort to effectively communicate and provide our familiar ***POBCSD Network Alerts*** to all users via district E-mail and/or required direct communication to individual buildings or clusters of users that may be unfortunately impacted at that time.

Short of making our computer network extremely restrictive and totally unusable by blocking non-district E-mail accounts, CD/DVD/Flash Drive/shared media access, Websites, attachments, etc.– the district has always taken the position to keep these necessary computer network functionalities **as open as possible** and continues to work hard to deal with the “reality” of these ongoing daily threats in order to maintain the integrity of our instructional/administrative programs that rely on uncompromised access to 21st century digital-driven content. On any given day, as multiple relentless threats/attacks continue to attempt to introduce themselves to our computer networks from outside sources over these past two decades, the district diligently secures, vaccinates, cures, neutralizes, and contains them so we can continue living our productive lives within the reality and realm of today’s digital-centric world.

In an attempt at one final analogy related to the uncanny nature of the humans and computers, the digital world is a lot like the weather. Even though the weather report may call for blue skies or thunder storms ahead (*we all know how that usually goes*) – in the end – it is incumbent upon each of us to continue to use our best judgment in implementing best prevention practices and take logical precautions we feel we may need to take in order to protect ourselves and family members from the impending storms that inevitably lie ahead. ***And just like inclement weather has a tendency to frustrate and disrupt our daily lives – technical issues sometimes too have no control over “mother nature” and must be patiently waited out like a storm.***

And so, in today’s unpredictable and threatening virtual digital climate, it is wise to remain prudent and consider every day a potential cloudy/rainy day (*with a beautiful silver lining of course ☺*); so please continue to be patient, take your umbrella, vitamin C, flu shot (antivirus) so you are always better prepared in the event of a storm - *Here, There, and Everywhere.*

For further information on this topic please refer to my article on this website titled [“Clicking While Computing: What You Should Be Aware Of”](#)