

How Personal Microphones Can Save Your Health

*A Primer on Microphone Etiquette
and the Hazards of Sharing Microphones*

By Joseph De Buglio



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Introduction

How often do you hear of concerts that are cancelled because the featured performer had the flu, a cold or a throat problem? Did you ever wonder how they might have gotten sick? Do you ever wonder why ministers traveling from church to church get sick so often?

In today's electronics age, common personal audio devices such as headphones and earphones are widely used — but seldom shared. So why is it that performers tolerate sharing microphones from venue to venue — with no knowledge of who's used the microphone before them?

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Beyond the health concerns of sharing microphones, there are true advantages to customizing a microphone to the performer. Microphones are vocal performers' instrument of choice and an extension of their singing or oratory talent, making it even more critical for them to own their own microphone. Seldom would you find a professional musician "sharing" an instrument from venue to venue. Professional musicians who take their craft seriously own their own instrument, whether it's a violin, guitar, or flute. Professional speakers and vocalists need to elevate their trade and invest in their own microphone — if not for their craft, then certainly for their health.

How Microphone Sharing Spreads Germs

Microphones can be a breeding ground for bacteria. Microphones are used in front of our mouths. They are spit on, sneezed on and handled from the top down. The germs and viruses left on a microphone can remain infectious for as long as 48 hours or more depending on how much moisture is present on the windscreen and the age of the windscreen. There is no way to clean a microphone for germs except to replace the windscreen. And even at that, there is no guarantee that the germs present on the rest of the microphone will not be transmitted when handled. The current health advisories regarding the multitude of flu viruses are not just cautionary but in many cases newsworthy due to their fatal effects.

Here is some basic information about viruses and bacteria and how there are transmitted.

Excerpted from the Mayo Clinic.

The length of time that cold and flu viruses can survive outside the body on an environmental surface varies greatly. But the suspected range is from a few seconds up to 48 hours, depending on the specific virus and the type of surface. Flu viruses tend to live longer on surfaces than cold viruses. Also, it is generally believed that cold and flu viruses survive for longer periods on

MICROPHONES 101

Microphones come in all kinds of shapes and sizes; the three most common microphones used are handheld, static microphones on lecterns or microphone stands, and body-worn / ear-worn mics. There is also another type of microphone that is used for audio pickup for musical instruments such as guitars and pianos.

A microphone is nothing more than speakers in reverse. In general, microphones used for singing or talking are mounted in a barrel or rod. Depending on the size of the microphone capsule between the output of the microphone and the output of the barrel, there are circuits that are either passive or active to boost the output to create the desired frequency response. Some mics are so small that they go from mic to barrel and out to a wire right away. Then within ten feet or so, a balancing circuit is placed into the barrel of a mic connector before the signal is sent to a mixer or recording device.

nonporous surfaces — such as plastic, metal or wood — than they do on porous surfaces — such as fabric or paper. Although cold and flu viruses primarily spread from person-to-person contact, they can also spread from contact with contaminated objects or surfaces. The best way to avoid becoming infected with the cold or flu virus is to wash your hands frequently with soap and water or alcohol-based hand sanitizer. Other tips for staying healthy during cold and flu season include:

- ▶ *Get a flu shot. This is the one of the most effective ways to prevent influenza.*
- ▶ *Regularly clean your desk, phone and computer keyboard and mouse — at home and at the office — with disinfectant sprays or wipes.*
- ▶ *Stay home if you're sick. Don't expose others to your germs by dragging yourself to the office, theater or PTA meeting.*

The cause of strep throat is a bacteria known as Streptococcus pyogenes, or group A beta hemolytic streptococcus. Streptococcal bacteria are highly contagious. They can spread through airborne droplets when someone with the infection coughs or sneezes. You can also pick up the bacteria from a doorknob or other surface and transfer them to your nose or mouth. Kitchen utensils and bathroom objects are other common sources of infection transmission.

In writing this article I surveyed a number of churches and also have a number of personal experiences where illness was spread from sharing microphones. I can recall at a church convention of 2000 ministers where after a week, all of the main guest speakers came down with a cold after the first guest speaker sneezed onto the lectern microphone 10 minutes into his sermon. At the end of the week, 9 ministers all went home with serious colds.

Proper Microphone Etiquette: Don't Share

Cleaning microphones after every use is good etiquette and a courtesy to others, but better yet, don't share microphones. If you do it is like sharing your toothbrush. I myself have been bringing my own microphone to lectures and seminars for years. Every few months I change the windscreen which costs about as much as a toothbrush, and wipe the barrel down after each use with alcohol hand wipes. I have not been doing that for sanitary reasons, I just like the way I sound on my microphone and I take care of it the same way musicians take care of their instruments. If you are a minister or performer and want to protect your voice and your health, you should be making the same investment as musicians do and personalize your microphone.

The typical microphone is connected to a sound system — either by a wire or through a wireless sound system. But the similarities end there. Every microphone has a personality just like its performer. Some microphones are ideal for bass singers. Some microphones are great for people who scream out their music. Every professional quality microphone model has unique characteristics, and within each model there are subtle differences — just as instruments that look alike will play differently for each performer. This is true for guitars, violins, pianos...and microphones. Visit a recording session at a high-end recording studio and you'll see every type and model of microphone that has ever been made to meet the artist's needs.

Sadly, there are only a few performers who travel around with personalized microphones. These performers may have personal microphones that are even custom finished with colored sleeves and windscreens to match the clothing

Sharing your microphone is similar to sharing your toothbrush.

they wear. Many people who see these custom microphones often think of the performer as having a big ego. But microphones are musical instruments too. They are an extension of the performer or speaker. Musicians frequently customize their guitars and drum sets. So what is wrong with performers doing the same with microphones? In fact, singers should have personalized microphones that they can bring from show to show. Personal microphones are especially important for lapel mics and headset or ear-worn microphones. There is a greater need to personalize them as the microphone is very close to the mouth and the capsule can remain moist for days.

Owning your own microphone need not be a major expense. But you should evaluate the cost of a personal microphone as an investment in your profession and your health. Handheld microphones range from \$100 to \$600 in general, while many new types of quality ear-worn microphones can be purchased for less than \$100 depending on whether it's for speech only or for vocal performance.

Microphones and their accessories can match performers' outfits, enhancing the entire stage show.



Shure SM58

Hand-held microphone with wide barrel.

Photo courtesy of Shure

Ear-worn microphone shown with detachable reversible earset clip.

Photo courtesy of Point Source Audio



Hand-held microphone shown with carrying case.

Photo courtesy of AKG



When Owning Your Own Microphone

A professional microphone used by one person can last for many years. Whether you're a singer in a praise team, singing to tracks from church to church, or performing at church concerts, you should be bringing your own microphone. You should have a case for the microphone, replacement windscreens and mini wipes to clean your microphone after each performance. Allow it to air dry before putting it back into its case. And as good general practice, use a hand sanitizer before and after handling the microphone.

With proper regular maintenance, a professional microphone used by one person can last 20 years or longer.

And don't forget to have fun too. Performing on stage is a great experience — it is uplifting and spiritual. Being on stage makes us all performers and this is as true for ministers as it is for vocalists. So why not take it to a higher level and truly make the microphone your own with a little stylization. For handheld microphones, you can have your name etched into the barrel or even have the barrel custom finished. You could also use colored tape. I know of one person who uses an embossed silver coated wall paper for the barrel of the microphone with a custom mic clip. The possibilities are endless. Remember, your microphone is in fact an instrument...and if you perform in public and use your voice as an instrument, you should be doing whatever you can to nurture and care for it.

To find out more about microphones, proper etiquette and maintenance, visit us at www.jdbssound.com.

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