

Protect Your Home from COVID-19:

Top 7 Infection Prevention Tips for Your Home

A Simple Solution to a Complex Problem:

Infection Prevention Report

By

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One of Henry the Hand Foundation's primary goals is to train personal protective behavior (PPB) by teaching everyone the role hands play in the spread of infectious diseases. COVID-19 (SARS CoV2) has demonstrated the weakness in our Public Health education much more than any other time in history. In the past 25 years our Foundation's efforts alone have not been sufficient to prevent this Pandemic, so we are asking you to help us train your family and community in these simple PPB (personal protective behaviors) strategies to maintain individual health and wellness. With this brief report we hope to empower individuals to protect themselves, their families and their community by implementing the 4 Principles of Hand Awareness in their daily lives.

Dr. Will Sawyer and his team have adopted the 4 Principles of Hand Awareness as the tenets for this simple educational program so everyone can integrate these simple infection prevention techniques and strategies into their daily routines that are proven to reduce respiratory and gastro-intestinal diseases. By practicing these PPB techniques, you will maintain a healthier, safer home environment from respiratory infections. If you help teach these 4 Principles in your community it will help keep our schools in session and increase employee productivity in our workplaces, as well!

After reading this report, you will understand:

- How to maintain a healthier, safer home environment from infectious diseases.
- The difference between primary and secondary infection prevention techniques
- Why cross contamination awareness is so important.
- How fast germs spread throughout your home when someone introduces a germ into your home.
- How you can protect yourself from viral infections like COVID-19 and H1N1 Flu.

- How the actual H1N1 Flu and COVID-19 pandemic could have been avoided.
- How future pandemics can be prevented.
- And much more!

A simple solution to the complex problem of respiratory infections:

It is up to YOU to PREVENT the spread of germs.

The power exists in everyone's hands to prevent **giving** yourself a respiratory or gastro-intestinal infection. This report will discuss the common misconception that someone else is responsible for **giving** you an infection. Yes, we are primarily responsible for giving ourselves the germ by planting it on our facial mucous membranes (eyes, nose or mouth), the only portal of entry into our respiratory and gastro-intestinal tract. We are the petri-dish (host) that grow, multiply and spread these infections like COVID-19.

Infection prevention starts with your personal hand hygiene habits and how you protect your home. The CDC (Centers for Disease Control and Prevention), healthcare, school, and food safety standards emphasize the importance of protecting facilities (hospitals, restaurants, schools, workplaces, etc.) from germ contamination. We recommend that you view your home like a facility that produces computer hardware equipment to protect your home from virulent germs and elements that disrupt you and your family's health.

Each home has a natural flora (environment of organisms). So, introducing other virulent (highly infectious) organisms can disrupt your home's balance. This report will equip you with simple primary infection prevention techniques, strategies to reduce infectious disease in your home, and tips for maintaining a healthier community by improving herd immunity (community immunity). There are some simple steps to follow to maintain a "safe home" that reduce the chance of introducing a virulent organism like COVID-19 into your home environment by washing your hands:

1. Immediately upon arriving home: from school, work, store, religious services, restaurant, healthcare facility or any other gathering of people to prevent bringing germs into your home.
2. Before eating and preparing food.
3. After using the toilet.
4. After blowing or wiping your nose.
5. After you cough or sneeze into a tissue.
6. Additional steps are leaving outer clothing (and even shoes if work in contaminated environment: healthcare and schools) at the entry.

7. Wipe commonly touched surfaces (doorknobs, refrigerator handle, TV remote, cell phone, countertops, etc.) frequently with soap and water or dilute bleach (10%) solution.

The top 7 infection prevention tips for your home are:

1) It is more than just Handwashing, it is Hand Hygiene Awareness.

Hand Hygiene Awareness is defined as hand hygiene, respiratory etiquette, and cross contamination awareness and in lay terms is simply described as knowing where your hands are, and what they are doing at all times. This concept of hand hygiene awareness has been a challenge for both Public Health departments and the CDC to help the public understand. The most comprehensive infection prevention strategy in the Home is to incorporate hand hygiene behavior awareness with surface cross contamination awareness in an integrated strategy.

- Although the term “Hand Awareness” has not been used much in Public Health, the hand hygiene awareness concept is reinforced routinely in both healthcare and Food Safety because of the “cross contamination” impact on healthcare associated infections (HAIs) and food preparation to prevent foodborne infections.
- Many people are familiar with the individual components of the 4 Principles of Hand Awareness, but far fewer people understand as an integrated concept of Hand Hygiene Awareness is a Best Practice for PPB (personal protective behavior) for respiratory and gastro-intestinal infection prevention. Even in healthcare the hospital infection control/preventionists only discuss hand hygiene and handwashing more commonly than Hand Awareness, that incorporates self-inoculation(contamination) of the mucous membranes which is so prevalent (colonization of nose).
- Most of us have heard the CDC and Prevention state, “Hand washing is the single most important method for preventing infectious disease”, but many do not follow that recommendation consistently. Handwashing is critically important to good health it only temporarily rids our hands of germs until we touch the next surface (doorknob, side rail, countertop, chart, drinking fountain, coffee pot, chair, desktop, faucet, handle, etc.) that might be contaminated by invisible organisms (viruses, bacteria, or fungi), making your fingers the 10 most deadly weapons! COVID-19 has taught us a lesson about the virulence of these invisible organisms that can exist on many surfaces.
- The action of Hand Hygiene (includes handwashing, hand sanitizers and hand wipes) is only one part of Hand Awareness. However, you must include respiratory etiquette and cross contamination awareness of surfaces, as we know if we have an invisible virulent germ on our hand so we must break the “unconscious habit” of touching the face. The concept of

Cross Contamination Awareness training is to alert you to the risk of “giving” yourself an infectious disease when you touch your “T-Zone”, (eyes, nose, and mouth) that you may have picked up from the last surface you touched earlier in the day since your last handwash.

- Hopefully, you are beginning to see why everyone needs to practice “Hand Awareness” to truly achieve infection prevention in the home to maintain good health.

2) Comply with and reinforce the 4 Principles of Hand Awareness in your home.

- The 4 Principles of Hand Awareness are:
 - 1) Wash your hands when they are dirty and before eating.
 - 2) Do not cough into your hands.
 - 3) Do not sneeze into your hands.
 - 4) Above all, do not put your fingers in your eyes, nose or mouth.

The 4 Principles of Hand Awareness have been endorsed by the AMA (American Medical Association) & AAFP (American Academy of Family Physicians).

- COVID-19 has heightened your awareness about the consequence of severe viral infections, so now you need to learn how to consistently protect yourself from every virus! Remember how you felt when you had your last respiratory or gastro-intestinal illness? You probably passed the illness around to all the commonly touched surfaces in your home so each of your family members could pick it up. The virus could have lingered in your house or work anywhere from one to three weeks! Did you ever say to yourself, “I promise to do anything to feel healthy again!”? Did you pray to anyone or just yourself to feel better? COVID-19 has taught us how devastating viral infections can impact families, community and economies.
- To prevent giving yourself COVID-19 or any other respiratory illness again, and to keep your household from harboring the germs that cause these illnesses in the future, you must take ownership of your personal hand hygiene behavior. Many people tend to naturally gravitate towards the opinions and advice of “experts” who look for a quick fix. Their solution is a vaccine, but there is no vaccine for every virus as it was for COVID-19 or the variants, so you need to protect yourself by taking command of your “hand hygiene behavior”. As you have come to understand, the flu vaccine does not prevent you from **giving** yourself the flu or COVID-19! As an effective harm reduction strategy for infection prevention, train yourself and others “Do not touch the T Zone”, the only portal

of entry into the body for ALL respiratory and gastro-intestinal infections. Remember we are the petri-dish that grow and cause Pandemics.

- You have probably heard that the only variables we can control are our own actions and attitudes, not those of others. Infection prevention follows this same principle. Maintaining the positive “can do” attitude and taking the proper steps WILL yield a more successful “safe home” environment from respiratory infections. Afterall, no one wants the flu or COVID-19 to devastate their family! One simple step is everyone wash their hands upon entering the home!
- You are most likely more passionate about health, wellness and preventing infections from entering your home than anyone else, so you need to be the ambassador of health in your home! That is why our goal is to “partner” with you and provide you with the best primary infection prevention tools to train (teach) your family and community. We developed our program understanding that your obligations as a parent and non-stop lifestyle, so created an Infection Prevention Tool Kit integrating Hand Awareness into your daily health behavior, so that infections do not interrupt you and your family’s lifestyle. As viral infections can lead to chronic disease, divert time and energy away from your family’s already busy lifestyle, let Henry the Hand help you keep your family healthy!

3) Promote proper HAND Hygiene behaviors in your home.

- Dr. Will Sawyer’s knowledge as a clinician and research in Hand Hygiene Awareness led him to construct a program, promoting effective hand hygiene behavior change using simple science based strategies and reinforcement tools.
- This Hand Hygiene Awareness program helps you improve your understanding of how infectious diseases spread. The program also empowers you to take ownership for your health by allowing you to utilize Henry the Hand® as a teaching tool to improve compliance with the 4 Principles of Hand Awareness.
- The program uses Positive Deviance strategies (Act your way into a new way of thinking rather than thinking your way into a new way of acting) which is a method many organizations have adopted to create positive change in the community when there is much resistance to change. This approach is based upon identifying individuals who use creative behaviors to achieve better results within the same environment who then help other community members achieve those better results. Since we have seen the benefits of these infection prevention behaviors, we have used this strategy to help teach people the 4 Principles of Hand Awareness and “Do not touch the T Zone” to enjoy better personal health!

- Our simple reinforcement tools serve as essential reminders to keep an individual on the right track and continuing the practice of the 4 Principles of Hand Awareness. Without utilizing the reinforcement tools and increased accountability techniques, most individuals revert to the old “bad” habits quickly.
- You will see why this Infection Prevention (Hand Hygiene Awareness) program is truly the most effective primary infection prevention program in the world!
- Taking advantage of our resources, and initiating a lifelong partnership with us, affords you and your family the best opportunity to decrease the incidence of respiratory and gastro-intestinal infection in your home by reducing your risk of contaminating yourself.
- Maintaining a “Safe Home” by having everyone wash their hands when entering the Home to reduce the chances of introducing a virulent organism into your home.
- Remember to regularly wipe (decontaminate) commonly touched surfaces in your house to reduce the density of germs that linger on surfaces, hence the chance of inadvertently giving yourself a germ if you touch the T Zone. Using a wet wipe or wash cloth with soap and water will suffice to “wipe off” those loosely attached organisms. Using a 10% chlorine solution helps kill virtually all germs, which is why it is recommended in the hospital environment.
- Remember that food preparation in the home is the most common source of food-borne illness. Those who follow food safety standards which in large part will also reduce the chance of spreading respiratory germs. Food Safety principles incorporate the 4 Principles of Hand Awareness (hand hygiene, respiratory etiquette and cross contamination awareness) with the additional dimension of temperature awareness.
- Cross contamination by hands is a common cause of the spread of disease during meals or snacks. For instance, “do not double dip”, or use your hand when serving yourself from a buffet, bowl or dish. Always use a serving utensil. Use paper towels, not a hand towel in the kitchen to dry your hands, it helps to remove 20% more germs and eliminates the possibility of cross contamination from the hand towel. Then wipe or wash your hands immediately before eating!

4) Most importantly, “Do Not Touch the T-Zone”!

- The 4th Principle of Hand Awareness, which is “Above all, do not put your fingers in your eyes, nose, or mouth” is most important to prevent giving yourself a respiratory infection. Yes, the eyes are connected to the respiratory tract.

- The T-Zone (facial mucous membranes) are the ONLY portals of entry into your body for all respiratory or gastro-intestinal disease. The eyes are critical portal of entry that most people do not know. Now you do!
- Since germs are invisible, it is impossible to know that you never have a germ (infectious disease) on your hand, so make sure you never stick your finger or hand in your T-Zone!
- As we mentioned earlier, there is a common misconception that someone else is responsible for giving you a respiratory infection. There are a few circumstances where you are not solely responsible for “giving” yourself a germ. One is an accidental T-Zone breach when an infant or toddler contaminates your T-Zone with their fingers while holding them. Or someone directly in front of your face (12-18 inches) coughs or sneezes directly into your face spraying droplets or aerosols that land on one of your facial mucous membranes (eyes, nose or mouth). Otherwise, we are the culprits who “planted” the germ by putting our own fingers in our T-Zone.
- All respiratory germs including COVID-19 are technically airborne since they are coughed or sneezed out into the air unless blocked by a tissue or an elbow. However, they do NOT hover like a helicopter, but are directed out in a gas-type plume influenced by air turbulence and gravity, ultimately settling on surfaces. The size of the droplet or aerosol and the force of propulsion of the cough or sneeze determines how far the germ inside a respiratory droplet/aerosol travel. If the germ is less than 5 microns it may travel up to 26 feet. If the germ is more than 5 microns then it may only travel up to 6 feet, which is the purpose behind the “social distancing” (physical distancing) recommended when people around you have a respiratory infection. Recent data suggests that whether the germ is “wrapped” in droplet or aerosol and turbulence in the room will significantly impact the distance it spreads.
- Using Henry’s Health Shield (face shield) is the most effective method to help break your “unconscious” behavior to comply with the 4th principle by making you more aware of the frequency with which you touch your face. We call it a Health Shield because if more people learn to “break their bad habit”, we can stop COVID-19 and many other viruses preventing any pandemic or epidemic from occurring again.

5) Understand the difference between primary and secondary infection prevention.

- Secondary infection prevention refers to improving your body’s reaction after an infection has entered your body. For example, COVID-19 or flu vaccines, or antibiotics/antiviral drugs, may lessen the body’s reaction to a virus, bacteria, or another organism. The benefit of the vaccines is to reduce your body’s reaction to any virus that you have “given” yourself. The BEST “vaccine” against all viral infections to NOT give (inoculate) yourself with the 10 most deadly weapons, your fingers!

The flu vaccine gives us a miniscule dose of the inactivated flu virus, or a component of the flu virus. The formulation of these vaccines is based upon projections about the next seasonal flu. These projections are drawn from health facilities' surveillance efforts the year prior. (Dr. Will Sawyer's private practice participates as an influenza sentinel site for the CDC sending patient samples to the surveillance lab). The flu vaccine helps promote a stronger immune response in your body to reduce the reaction if you happen to "give" yourself the flu.

If the flu virus strain used to create the vaccine doesn't match the flu virus circulating that year you may have a strong, adverse reaction to that virus. The flu vaccine is between 10-60% effective annually in past 10 years. So why risk contracting any viral infection that do not have a vaccine, so STOP touching the "T zone" (mucus membranes of the eyes, nose or mouth)!

Vaccines and medications (secondary prevention techniques) do help to combat germs after inoculation (introduction) into our body. If our immune system performs optimally, then our bodies will see a protective response from vaccines.

- True primary infection prevention is literally "in your hands". Primary infection prevention does NOT refer to giving oneself the virus or bacteria as a means of prevention. The goal of true primary infection prevention is NOT to provide your body the opportunity to "fight" off the virus, instead it is to prevent giving it to yourself. Primary infection prevention techniques DO revolve around the 4 Principles of Hand Awareness, a concept Dr. Will Sawyer has spent over 20 years perfecting and teaching.
- **Flu vaccines DO NOT prevent us from giving ourselves the flu! Similar circumstance with COVID-19.** We give ourselves the flu if we put our hands in the T-Zone (mucous membranes of the eyes, nose or mouth), the only portal of entry into the human body for all respiratory infections. That is why it is so critical to comply with the 4th Principle of Hand Awareness! (See Tips 3 and 4 for more explanation). True primary infection prevention literally "is in your hands". Primary infection prevention refers to NOT "giving" oneself the virus or bacteria as the best method of prevention. The goal of true primary infection prevention is to prevent any respiratory virus to enter your body.
- As adults we all know that touching a hot stove with your hand initiates a "withdrawal reflex" in your body to never do that again! We are trying to simulate that reaction with a Health shield. For those who learned the hard way invoking their withdrawal reflex response through their own reflex arc in their nervous system that does not invoke higher cortical (brain) function. So, you have learned that the simplest way to avoid burning yourself is do not put your hands on the stove and you will not burn yourself! We have invoked this same somatic reflex (stimulus-response motor pathway) in our training program using a face shield (Health Shield) so you "break the unconscious habit" of putting your fingers in your eyes, nose, or mouth and you will not give yourself the flu or flu-like illness. This same somatic stimulus-response pathway helps to STOP adults from touching a hot stove and we have invoked this strategy to teaching (re-training) adults to STOP touching their T Zone. However,

if you practice wearing a face shield (barrier) as an instant reminder to interrupt your unconscious habit, as the feedback is not as painful as a hot stove and requires more executive (brain) function invoking “muscle memory” of the withdrawal reflex to extinguish the bad habit when not wearing a face shield (barrier). More than likely children will not understand the consequence of touching the T Zone, so it is critical that adults model the correct behavior consistently to teach the children the correct behavior. We are training you to equate touching the T Zone with getting “burned” from a hot stove then it would have a significant impact on reducing your infectious disease events! Dr. Will’s “Do Not Touch the T-Zone” concept (tip 4) is trying to create a lasting personal impact touching a “hot stove”!

- Metaphorically speaking, we can “burn” ourselves with an infectious disease (COVID, Flu, RSV, CMV etc.) that could cause acute infectious disease and even mortality just by touching your T-Zone. Since it is neither an instant reaction nor a guaranteed infection which may result in the form of viral infection symptoms that manifest 24-48 hours later, it takes more understating (executive process). COVID-19 (SARS CoV2) has taught us that there is a need to train ourselves by using tools that instantly and positively reinforce the 4th principle of Hand Awareness: Do Not Touch the T-Zone (tip 4).
- This tip reiterates why the 4 Principles of Hand Awareness are so important. The remaining tips in this report will focus on developing a better understanding of true primary infection prevention techniques.

6) Spread the word not the germs!

- The fastest, most effective form of advertisement is word of mouth. Think of the last time you went to a movie. Did you share your enthusiasm with someone about it? Did your opinion influence their decision to go see that film? The Henry the Hand® Infection Prevention program encourages the same strategy to “spread the word not the germs” so your family friends may enjoy better health! You possess the power to help teach others this simple message of the 4 Principles of Hand Awareness with friends, family members, students, employees, and co-workers. Together we can make a difference in stopping COVID-19 and preventing other seasonal flu epidemics.
- By teaching and empowering those around you to be more “Hand Hygiene Aware” you will help safeguard the personal health for your family and others in the community. Herd (community) immunity and harm reduction are the basic premise for ALL vaccination programs. The herd is protected when the majority of individuals are immune to suffering a severe reaction from the specific virus, so if enough people adopt these harm reduction primary infection prevention techniques, there will be less virus circulating in the community and fewer incidence of illness. Remember, humans are the petri-dish (host) that grow, multiply and then spread all viruses, including COVID-19. For COVID-19 the result would be less burden on hospitals and then a more open economy!

7) For the best infection prevention results in your home, influence other facilities in your community.

- Think about how germs spread in your home (classroom or workplace). Within 24 hours of introducing a respiratory infection into the home or workplace, 90% of the commonly touched surfaces will become contaminated with the germ (Chuck Gerba, PhD). All it takes is one person to introduce a virulent organism into the work/classroom environment that can start a chain reaction; one person contaminates (plants or coughs/sneezes) a surface with a germ, then an unsuspecting person touches that same surface with their hand, can unknowingly pick up that germ and spread the germ by their hands to other surfaces, including their facial mucous membranes (T Zone). As you have seen with many infection outbreaks in schools, cruise ships, hospitals and nursing homes now with COVID-19.
- If we can make individuals more “Hand Aware”, knowing where their hands are and what their hands are doing at all times, it will decrease the incidence of germs brought into any facility (home, workplace, school etc.). Hence, we will drastically decrease the probability that surfaces will be contaminated and reduce the chance an unsuspecting person will pick up a germ on their hand(s) when touching the commonly touched surfaces and carry it to another surface, including their own facial mucous membranes (T Zone)! Are you “seeing” the domino effect? This is why it is so important to WASH (or sanitize) your hands upon entering any facility, removing those germs from your hands and down the drain to protect the facility.
- Most schools are the center of every community and many infectious diseases are spread from there. If the students are not ill from respiratory and gastro-intestinal diseases, then the community will have less incidence of illness from these same types of diseases. Unfortunately, many schools have been experiencing a shortage in funding for many years. We recommend you help these schools by finding a sponsor to “Adopt a School” to fund the purchase of an Infection Prevention Tool Kit or Partnership for the School. Remember, we humans are the petri-dish (host) that multiply and spread respiratory infections, so if we don’t “give” ourselves the germ then it cannot multiply and handwashing will keep germs from spreading from surface to surface!
- Diligent consistent effort implementing the 4 Principles of Hand Awareness is one of the BEST methods to prevent respiratory infections from impacting your local school and family, hence will decrease the spread of germs in your community. Children and adults who are not practicing all 4 Principles of Hand Awareness will continue to give (self-inoculate) themselves and then spread respiratory infections, like COVID-19. The result is infections may force parents to stay home from work to tend to sick children reducing their productivity and

increasing their risk of illness, as well. Yes, since it has been shown many adults go to work sick (presenteeism), then they can carry these germs to work and their community contaminating many surfaces, perpetuating the domino effect. So, if adults were more “Hand Aware” they may not contract their child’s infection in their home and reduces the risk of spreading or contracting germs in their workplaces, as well. The impact on reducing incidence of respiratory infections in communities minimizing risk off epidemics is why CDC recommends that adults who are ill to stay home.

- In addition to schools many businesses in your community would benefit from improved Hand Hygiene Awareness programs protecting their workforce and maintaining productivity. Hospitals, workplaces, physicians’ offices, eating establishments, religious institutions, and many others stand to improve the well-being of the staff and members. So, you can begin to see why we ask you to please encourage individuals at these facilities to practice the 4 Principles of Hand Awareness.

Conclusion: Rely on us as your #1 resource for infection prevention guidance.

By applying the *Top 7 Infection Prevention Tips for Your Home*, you and your family will maintain better personal health and positively benefit the health of your friends and community by reduced infectious disease incidence. Our goal is to decrease the incidence of and the spread of infectious diseases by empowering individuals to practice the 4 Principles of Hand Awareness and to educate their communities as well. These Principles are a simple solution to prevent many complex infectious diseases, including COVID-19!

Take away message: These resources help you to maintain better health for yourself and your community. By equipping yourself with our resources and coupling them with the knowledge you have gained from the tips in this report, we are confident that you can effectively prevent the spread of infectious disease in your home. We invite you to use our website, subscribe to our *Infection Prevention eNews*, and use our Infection Prevention products. Email or call us anytime. Together we can make a difference!