

## COVID-19 and blindness: Why the new touchless, physically-distant world sucks for people with visual impairment



As a congenitally blind person, it has become obvious to me that my reliance on touch as a primary mode of experiencing the world puts me at odds with current best practices for avoiding the coronavirus. The principle guidance for safeguarding against COVID-19 is to (1) curtail physical contact with those around us (or the things they touch), (2) limit touching of our body (especially of the face), and (3) maintain a minimum proximity bubble during social interactions (ideally of 6-feet or more). In this essay, I discuss how an unanticipated consequence of following this tri-part guidance for staying ‘safe’ is the effective demonization of touch, which has led to many unforeseen challenges for more than 12 million people in the U.S. (and over 285 million people worldwide) who are blind or visually impaired (BVI).

When you cannot see the world, touch picks up the slack for vision by taking on a dominant role in how it is explored, understood, and interacted with. For BVI people, perception inherently involves touch, either with the hands or the long cane. This physical contact provides critical knowledge about all matter of things: monitoring if one’s hair is a mess, identifying what is in the immediate vicinity, orienting to people or objects in the surrounding environment, etc.

Indeed, touch and vision communicate much of the same information about the world. Feeling or seeing the curve of my coffee mug, the 90-degree edge of my desk, the relation of my computer to my phone, and many other spatial attributes can all be perceived similarly from both sensory inputs. This sensory equivalence helps explain why touch fills many of the same ‘shoes’ as vision for blind folks, albeit at a much closer distance. Thus, in many ways, **asking a blind person to curtail touching is analogous to asking a sighted person to go about their day wearing a blindfold.**

In the remainder of this essay, I will discuss my perspective on the relation of touch to each of the three pillars of COVID-19 protection.

### 1. Touch and Physical Contact:

The guidance to limit physical contact with any public-facing surfaces and to not touch those around us is incredibly difficult for BVI people. Part of the challenge is logistical, when your hands take on much of the work of your eyes for apprehending the world, it is simply not possible to not touch doorknobs, railings, tables, and the like. This is concerning, as it is precisely these common-use surfaces that are most likely to be vectors of COVID-19.

The best advice for anybody exposed to such things is to immediately wash their hands, for at least 20 seconds each time. Unfortunately, I have found that an unexpected outcome of this frequent hand washing regimen is that the prolonged exposure to water desensitizes my fingers, resulting in me becoming functionally illiterate after the process. Reading braille inherently involves high resolution touch and the endeavor is rendered useless when done with prune-like fingers.

My friends keep telling me to wear gloves when I go out in order to reduce the need for hand-washing. This represents a reasonable suggestion for most people but turns out that donning gloves is a poor solution for BVI individuals, as any barrier between the skin receptors and the surface, even if thin, desensitizes the fingers and greatly masks what is being felt. The result is roughly analogous to a sighted person wearing blur glasses as they go about their daily activities.

For BVI people, physical contact plays many roles. Sometimes, it is purely functional. For instance, many BVI individuals hold on to the elbow or shoulder of a 'sighted guide' during navigation. Whether it be because they have left their dog at home for an evening out at a concert, are not using their cane on a romantic walk with a partner, or that they simply prefer this mode of guidance, the process inherently involves physical contact.

In the BVI community, touch also represents an important component of building rapport and developing inter-personal connections. Similar to how a sighted person may feel they are not fully engaged or clearly communicating if they don't make eye contact when talking, BVI people often derive the same sense of connection by touching the arm or shoulder when communicating.

This contact conveys emotional engagement, but it also provides the BVI communicator with a sense of physical presence and immersion that is important for directing attention and staying focused. The fact that so much communication is happening remotely nowadays has definitely limited my ability to fully engage. I hear the relief of my sighted peers when their video kicks in and they can see the other video-equipped participants in a Zoom meeting, but I have no way to experience a similar remote replacement for physical contact.

The fear and distrust of touch has crept into even the most mundane of my daily activities. In the past, a friend or colleague might touch my arm to get my attention, guide my hand to check out some interesting thing we are walking past, touch my shoulder to direct me to move one way or another, or even draw the shape of something on my arm as part of an explanation. These subtle forms of physical contact, often done unconsciously, are important to BVI individuals for supporting efficient communication of information and navigation of their world. The loss of these small but significant forms of contact because of pandemic-related concerns often leaves me feeling adrift, unfocused, and less connected to those around me.

We all use touch as a mode of inter-personal communication and emotional expression (handshakes, fist bumps, hugs, etc.). This physical contact during social interactions has other benefits for blind people that may not be immediately obvious to their sighted peers.

For instance, shaking a person's hand confers information about exactly where they are in relation to me, which is extremely helpful for self-orientation. This is important for promoting natural social interactions (realizing I am looking in the wrong direction when talking to somebody because I didn't know that they had moved is incredibly awkward).

A hand shake also provides important knowledge about the other person that is readily perceived through sight. For instance, hand size and structure tells me something about general body type and weight, the elevation of the hand, in conjunction with voice, provides me with information about height, the texture of the skin, feel of the finger nails, and presence/nature of rings imparts information about style and self-grooming practices, intensity of the grip provides information about physical strength and confidence, etc.

When you cannot see the person you are interacting with, a battery of other sensory cues substitute for vision in building up an image of them. These subtle handshake cues are just one example of how nonvisual information (often through touch) conveys relevant information about the physical characteristics of a person that is both informative and interesting. **I find that the new touchless modes of meeting and social interaction have left me more 'blind' to the world than vision loss, which I have learned to compensate for.**

There are some less obvious aspects of touchless communication for BVI people that are worth considering. Of note, the pandemic-induced increase of handshake-free greeting by waving and nodding, touchless hugs, and air pats on the back are largely meaningless when done without vision. Not only is it hard for me to tell if I am gesturing in the right place, I cannot appreciate or benefit from these gestural interactions by others toward me (I have never understood why people still flip me the bird).

The move toward other types of non-hand contact can even be dangerous. In a recent elbow bump accident, I missed my friend's elbow and caught her on the chin (she is significantly shorter than me). This has led me to curtail all elbow and fist bumping activities. I cut out high fiving years ago due to a similar experience where a particularly exuberant hand-slap went amiss, and I almost broke a buddy's nose.

Often, physical contact occurs unintentionally, such as accidentally bumping into somebody when navigating a busy area or inadvertently touching the barista's hand when reaching for the change. These commonplace instances of accidental touch are normally trivial, resulting in an "excuse me" and then moving on.

However, when the same inadvertent contact has occurred over the past couple months, people respond with fear and panic. Although I cognitively know that this response is about a fear of the coronavirus and not about me or the accidental contact, the result is that I feel shamed by my affiliation with touch and my need to rely on this modality.

## 2. Face Touching:

The guidance to limit body contact, and to especially not touch one's face, represents a specific example of the above point posing particular challenges for BVI people that many sighted folks may not have considered. In many ways, a blind person uses exploration with their hands for self-monitoring much like a sighted person might use a mirror.

My hand(s) are the surrogate mirror each morning when I want to check whether my beard is trimmed in a straight line, or if I have bed head, or to ensure that I don't have a smidge of toothpaste on my lip, or something gross crusted in the corner of my eye, or some nastiness around my nose from my allergy drip, and a myriad of other self-care activities that we all do but rarely talk about. This basic self-monitoring, whether performed using touch with the hand or using vision with the mirror, is important for daily grooming and for maintaining one's hygiene. In the COVID-19 reality, these normal, unassuming activities of daily life, when performed using touch, now represent heightened risks.

Can touching of one's face expose you to the coronavirus, absolutely. But...should I stop engaging in self-monitoring and information-gathering tasks by means of touching my face, mouth, eyes, and nose, absolutely not. Regardless of one's visual status, everybody will have the occasion of doing such things and blindly reducing our hands, and our use of touch, as little more than conveyance agents of the coronavirus is neither helpful nor scientifically accurate.

If we are to act (and react) realistically, face touching will inevitably happen in the course of daily life. This is okay, it represents a normal activity that does not inherently increase the risk of COVID-19 infection when done prudently. **The point is that rather than fearing a normal action and the sensory mode that supports that action, we should focus on the virus itself and how we can be best protected.** With respect to face touching, this can be easily done by limiting contact to instances of information gathering rather than habit and being vigilant about washing our hands (even if they become shriveled and prune-like).

### 3. Social Distancing:

Beyond direct physical contact, the key safeguard for avoiding COVID-19 infection is to maintain good social distancing behavior. Following these guidelines, which involve keeping a 6-foot radius between yourself and anybody around you, is trivial when performed using sight but if you try doing so with eyes closed, you will quickly find it is extremely difficult.

I generally only become aware of another person in my vicinity when I hear them talk, when I touch them with my hand, or perhaps if close enough, when I smell their presence (yes, most people have a distinct "smell" which is agnostic to being bad or good but that most people immediately assume is bad). The breadth and depth of what can be perceived from these nonvisual modalities is much less than vision and as a consequence, the experience of the perceived world for BVI folks occurs at closer range than for their sighted peers.

Touch occurs within arm's length, which can be extended out a yard or more if using a cane but still violates the magic 6-foot corona bubble. Hearing can occur at much greater distances but in reality, recognizing someone's voice and talking to them at normal conversational levels also occurs within a 6-foot radius. Importantly, if anybody in the surrounding environment is silent, they essentially do not exist to a BVI person.

The challenge of maintaining appropriate social distancing behavior without vision is two-fold: (1) difficulty in gauging the distance of nearby people (assuming they are detected at all) and (2) challenges in maintaining this distance during movement.

I find myself frequently violating the 6-foot corona bubble as I have no easy means to monitor its boundary, which is elastic and constantly changes in real-time with my movement and the movement of those around me. While I can imagine technological solutions for addressing this social distancing problem, the standard tools of long canes and guide dogs are not up to the task as canes are too short and guide dog training is not consistent with following social distancing procedures.

For instance, my dog guide, Bernie, was trained in New York and as was normal until the pandemic, was taught to operate in crowded situations by maximizing use of any available space. This includes going through any gap big enough for him and me to fit through, meaning that we often get very close to people as we navigate. Although I am trying to re-train him to ‘appreciate’ accepted social distancing behavior, maintaining lots of empty space around us makes little sense to Bernie and he is loath to do so.

This is increasingly problematic. As I approached an intersection on a recent walk, I heard this obviously freaked out person start yelling at me to “watch out” and “to not get any closer or I’ll kick your ass”. Besides the logical incongruity of inviting a blind guy to watch out for who is around them, their threat to physically attack me would seem to be a blatant violation of the ‘no contact’ rule of social distancing that they so vehemently want to uphold.

I understand that this incident, like so much associated with COVID-19 responses, is based on fear rather than logic but...it doesn’t make dealing with the problem any easier. However, I have found that people exhibit less concern if bubble violations occur when I am verbally instructing the dog.

So, if I am aware of people around me when walking I tell Bernie to “stay left/right” as I pass. This doesn’t generally result in any actual change in his behavior or creation of additional distance, but it seems to put people at ease. It can backfire though, as sometimes people dart one way or another to preemptively create space and Bernie interprets this odd, fast moving behavior as encouraging of play, which sometimes induces him to veer toward the person, causing additional angst (and renewed hurling of invective).

With respect to touch, two things strike me when thinking back over the past three months of living in the COVID-19 world. First, although I knew that I relied heavily on touch, I didn’t realize its true magnitude in supporting my own self-monitoring behaviors, its role in how I interact with others and engage with the surrounding environment, and its impact on my emotional and social wellbeing until these interactions became associated with negative consequences.

Second, while I appreciate the value of the safety guidance being advocated, and understand people’s concerns around physical contact, I cannot comprehend why people are not more troubled about the growing fear and distrust of one of our primary sensory channels—that of touch. If the sensory tables were turned and the primary safety precaution from the CDC involved significant limitations on use of visual perception; for instance, use of blindfolds in public, the result would be very different.

Rather than apathy, as is the case with touch, there would be an outcry about the ‘cure being worse than the problem’. The majority of people would inevitably ignore this guidance, preferring to risk infection over safety.

The reality is that most people have a deep-seated, visceral fear of losing their vision but as is obvious from the gee-wiz response to COVID-19, they possess little concern about giving up their access to the richness of touch. As a blind guy, I do not share this fear of vision loss, but I’m petrified about losing any of my other senses. The realization that touch, the closest sense to vision and a primary means of how I perceive the world, is now something to be feared and distrusted, is existentially disturbing to me.

What has been lost in the pandemic panic is that following good safety practices and appreciating touch are not mutually exclusive. This seems obvious to me but at the end of the day, logic has very little to do with people’s responses to the coronavirus.

Unlike the standard flu, there is currently no vaccination and there is a much higher risk of dying. However, what I argue is most threatening, we are under attack via an invisible disease vector that may be

on anything we touch or that could emanate from anybody around us. The issue is of classic transference. We cannot see the COVID-19 coronavirus, but we can certainly see people who may have it. We have been told (and have internalized) that our greatest risk of contracting the virus is through close proximity or physical contact with these people, so our fear is erroneously transferred from being afraid of COVID-19 to being afraid of touch.

This transference is dangerous as rather than focusing on virus risk mitigation, people's attention is misdirected toward castigating a sensory modality as a proxy for disease. The outcome, albeit unintended, is stigmatization of an entire sensory modality and fear of anybody who still dares to use it rather than simply adopting healthy practices around touch.

Touch is not the culprit here. Physical contact should not be villainized; the virus is the problem but unless we figure out a better way to disentangle the two, I worry that touch as we know it will be the first candidate for inclusion on the Endangered Senses list.

Given the transmission characteristics of COVID-19, there is no simple fix for saving touch in the court of public opinion. I do believe there is a solution, but it is more about changing our mindset than our behavior.

Put most simply, we need to stop conflating touch with disease. Doing so is not only inaccurate, it perpetuates an irrational fear of a general method of perceiving the world rather than a healthy concern for avoiding contracting a specific virus.

Touch may be a path of conveyance but as with many other correlated action/response pairings, the result is contingent on many factors, most of which are imminently under our control. We don't villainize the sun because it can give us skin cancer (we simply put on sun block) or distrust welding because the bright flashes can damage our eyes (we wear protective glasses), or avoid rock concerts because they can damage our hearing (we don't use ear plugs), or fear skiing in winter as we might get frost bite (we put on gloves). There is no need to throw the baby out with the bath water regarding our sense of touch and COVID-19 protection. As with our use of sun block, protective glasses, ear plugs, and gloves, we can best protect ourselves by understanding the real risks associated with this pandemic and not becoming blinded by perceived proxy threats.

The best approach is to be mindful of minimizing touching of people (especially those we do not know or feel safe around) and to limit contact with public surfaces. When these physical interactions occur, there is no surrogate for prudent use of sanitizer, thorough disinfection of frequently touched areas, and assiduous hand washing (braille reading and literacy be damned).

However, it is important to keep these things in perspective. Simply touching your face to scratch an itch, shaking hands with a colleague, hugging a family member, or coming within six feet of a friend is not synonymous with contracting the coronavirus. If you interact with a BVI person, don't freak out if there is physical contact, accidental or deliberate, don't avoid assisting an older person who has tripped and needs a stabilizing arm, or shy away from helping a child up who has fallen. These actions are what makes us human and what supports a civilized society.

Such behaviors should not be conflated with disease or increased health risks. Touch is not bad, being physically close to others is not bad. Experiencing these things and being safe are not mutually exclusive and can absolutely exist harmoniously in our COVID-19 culture when we follow appropriate safety procedures. Fear-driven responses and mindless adherence to guidelines is neither healthy for one's psyche nor for promoting meaningful social interactions.

While I can make this point until the cows come home, the reality is that the best practices for reducing the risk of COVID-19 contamination are contrary to many of the ways that BVI people experience and interact with their world. If you cannot see, you touch, but if you cannot see and you cannot touch, the world quickly becomes impoverished and wanting (the current situation is even more dire for my deaf-blind friends).

This is not to say that specific COVID-19 accommodations should be made for BVI people but since this demographic is not going to stop touching their world, it does raise the specter of their potential alienation living as part of the new touchless normal. I know I am not alone in increasingly feeling like a pariah when in public, keenly aware that my way of experiencing the world is now fundamentally at odds with the majority of those around me.

I usually embrace the notion of being unique, of diversity through difference, and of opposing points of view. But...the growing aversion to touch is very different than if I were to be disliked for having contrary political views than somebody else, or were judged for what I am wearing.

It is unrelated to my conscious decisions; the fears and avoidance I am experiencing are based on my fundamental method of perceiving and interacting with my surroundings, which I cannot change. In some ways, and this is admittedly irrational, the growing societal rejection of touch feels like an aggregate rejection of Me.

At the end of the day, it doesn't really matter if the negative touch response (or its impact on me/others) is an unintended consequence, or due to transference, or over reaction—the COVID-19-induced backlash against touch is real. Troublingly, this response is likely to escalate as the economy starts to open, more people go outside, and social interactions (planned or otherwise) become the norm as people return to living their lives, albeit in a socially distanced, touch-minimized manner. **The result for BVI people is that many of the issues discussed here will persist and even increase, meaning that the new touchless normal is going to continue as the awkward abnormal for the BVI community.**

I am accustomed to a world that minimizes the role of touch, as it will always be the underappreciated younger sibling to vision, but a touchless future where we no longer shake hands, hug, or express physical affection is not a future I feel excited about. Unfortunately, I worry this trajectory will continue unless we accept the mindset that safe and healthy behavior is possible without catastrophizing physical contact and bastardizing the sense of touch by equating it with disease. Until then, I mourn the loss of the world's feel around me.