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NEWSLETTER

Learning to Live with the COVID-19 Pandemic!

Are the CDC *Bartonella* Zoonozes Recommendations Sufficient?©

Evelyn E. Zuckerman, Editor **Spring 2023** **Vol. 22, Number 2**

In This Issue:

The Spring 2023 issue of the NVL Newsletter, released on May 10th of each year, will discuss where we are now more than 3 years into the COVID-19 pandemic. We will also ask "are the CDC *Bartonella* zoonoses recommendations sufficient?

William D. Hardy, Jr., V.M.D.

Learning to Live with COVID-19?

The World Health Organization (WHO) declared the 2019–20 coronavirus outbreak a Public Health Emergency of International Concern on January 30, 2020, and a pandemic on March 11, 2020, exactly 3 years and 2 months ago.[1] Now, only 5 days ago, on Friday May 5th, the WHO declared that the coronavirus emergency was "over" which signaled the end of three-years that the COVID-19 pandemic killed at least 7 million people and changed life as we know it.[1-2] May 11, 2023, marks the end of the federal COVID-19 Public Health Emergency declaration. This means vaccines and treatments will still be available, home COVID test kits may not be paid by medical insurance, and data collection and reporting will change. After this date, CDC's authorizations to collect certain types of public health data will expire. The world, and our country, have stumbled during this time with some excellent solutions and many missteps along the way. WHO reports the USA has exceeded 1.3 million deaths, **1 in ~330 Americans!**[1]

Also on Friday May 5th, CDC director Rochelle Walensky, whom was often criticized for her unwavering support of vaccines and masks, announced that she was stepping down as the director. The CDC's and John's Hopkins University's coronavirus tracking dashboards are being scaled back.[3,4] Many restrictions have recently been lifted such as mask-wearing, postponing mass meetings and gatherings, and airline, cruise ship requirements and even some vaccine mandates. Life does seem to be returning to a more normal. Is the COVID-19 becoming endemic in this country (existing at a base level)? Dr. Tedros Adhanom Ghebreyesus, the WHO director-general, pointed out that the virus continues to kill and sicken thousands of people daily across the world. "This virus is here to stay. It is still killing, and it's still changing," Tedros said. Is the SARS-CoV-2 and COVID-19 now endemic in the USA?[1]

According to the CDC, current COVID-19 cases and deaths are down, weekly cases as of May 3rd were 77,294 and weekly deaths were 1,109.[3] This is compared to the worst week of the pandemic, January 19, 2022 where there were 5.650,933 cases and the worst week for deaths was January 13, 2021 with 23,629. We are presently at a much better place; however, current data may be influenced by the widespread use of home COVID-19 testing, that does not get reported, and the fact that many state and county monitoring systems have been eliminated. A major reason for this improvement probably indicates that many people have some degree of immunity through vaccination or by natural infection. Another reason is the fact that there has not been the occurrence of significant new, more dangerous, SARS-CoV-2 variants. Many experts still recommend caution since in the past, a decline in cases has occurred in the spring followed by a resurgence of cases during the summer, beginning in the south, when people congregate indoors to avoid the heat. Experts still recommend mask wearing when attending crowded indoor events. This may be what we will be facing for years to come, a relatively lower level of persistent SARS-CoV-2 infection.

COVID-19 Statistics:

The CDC Data Tracker statistics, collected for the USA Coronavirus (COVID-19), have improved.[3] More deaths still have occurred in unvaccinated people than in those vaccinated.

CDC Data Tracker for the Pandemic[3]

CDC USA: COVID-19 weekly data ~ May 10th

	May 13, 2020	May 12, 2021	May 11, 2022	May 3, 2023*
Cases:	160,786	260,679	590,341	77,294
Deaths:	10,488	4,281	2,157	1,109

***CDC datatracter has been terminated as of May 3, 2023.**

WHO Cumulative COVID-19 data as of May 2, 2023:[1]

	Cases	Deaths	%
Global:	765,222,932	6,921,614*	9.0%
USA:	103,266,404	1,124,063	10.9%

*WHO actually estimates that 15 million people have died of COVID-19 since the start of the pandemic.

**CDC- USA fully vaccinated & boostered: 17%[3]

Vaccines: Current vaccines were prepared from the original Wuhan SARS-CoV-2 isolate from 2019 and were available to almost all US adults by May 2021. The vaccines were all about 90% effective against the original Wuhan SARS-CoV-2 isolate and, at that time, the outlook looked good. **Presently 69.5% are fully vaccinated but only 17% have the update bivalent booster vaccine.**[3] We rank only about halfway in the world with percent population vaccinated, behind countries like Bangladesh and Nepal. And unfortunately, present vaccine mandates are being withdrawn in many places in this country. **COVID-19 vaccinations are credited with controlling the pandemic so WHY now lift those mandates when variants are continually being generated?**

Disease: Despite an increase in transmissible SARS-CoV-2 mutants, there was a decrease in diseases and deaths. We rapidly developed the first and best vaccines, yet due to political interference, internet misinformation, antivaxxers, and uneven medical coverages, we lead the world, by far, in total COVID-19 cases AND deaths.

Long COVID: The estimated global long COVID syndrome is 49%.[5] For patients that were hospitalized it is 54%, while it is 34% for outpatients with COVID-19. Their most common symptoms are fatigue 23%, followed by memory problems 14%, shortness of breath 13%, sleep problems 11%, and joint pain 10%.

Therapy:[6,7]

Drugs- Antivirals:[6,7]

Paxlovid™-ritinovir-boostered nirmatrelvir

WHO and NIH strongly recommend the use of Paxlovid in patients with non-severe illness at highest risk of hospitalization. It has demonstrated antiviral activity against all coronaviruses that are known to infect humans. Paxlovid reduces the risk of hospitalization and death by 89% compared to a placebo. **Paxlovid is the drug of first choice. Paxlovid is a major breakthrough and gives hope for controlling the pandemic.**

Animals- Spillbacks:

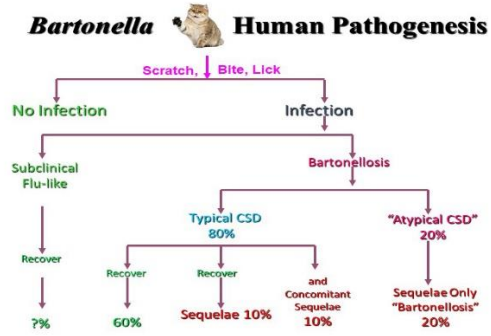
Susceptibility: Many animal species are susceptible to infection of SARS-CoV-2 from people and some can transmit the virus directly among their species. Now 5 animals, mink, mouse, hamster, deer, and cat, are able to re-transmit the virus back to people (spillback).

Many white-tailed deer, in the USA and Canada, have high prevalences of SARS-CoV-2 infections with several variants. There is an epidemiological link to a human case in the area which indicates spillback, deer-to-human transmission.[8] This is new evidence that mutants are being generated in deer which could make some more virulent for people. **However, there has been little to no evidence that our concern for important spillback from animals has or is occurring.**

Are the CDC *Bartonella* Zoonoses Recommendations Sufficient?[9]

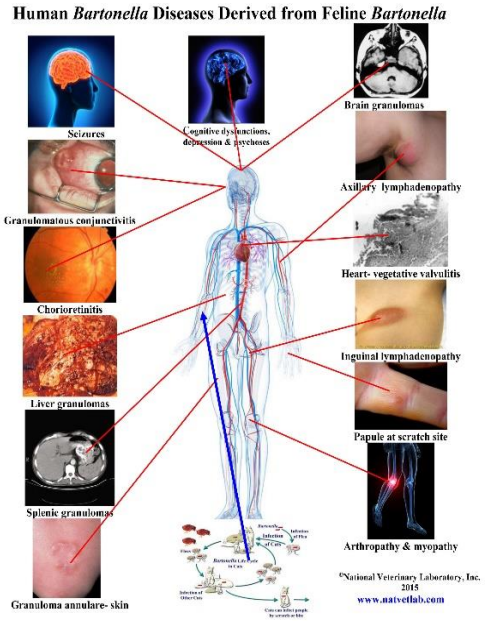
Below are our *Bartonella* pathogenesis and disease spectrum of *Bartonella* zoonotic diseases in people. We have questioned the wisdom of the CDC *Bartonella* recommendations for many years as we feel they do not consider the severe sequelae caused in many infected people.[9,10,11]

Figure 1



Feline *Bartonella* not only cause cat scratch disease (CSD) they also cause sequelae in various organs which can be more severe. The CDC website does not stress these occurrences in spite of the thousands of *Bartonella* references in the literature.

Figure 2



CSD: US Physicians Experience and Knowledge:[12]

A paper entitled: Cat scratch disease: US clinicians experience and knowledge, by Nelson C.A., et. al., from the Centers for Disease Control and Prevention in Fort Collins, Colorado, investigated the experience and knowledge of physicians in the US concerning CSD.[12] They surveyed 3,011 primary care providers, family practitioners, internists, pediatricians, and nurse practitioners, during 2014-2015, as part of an annual nationwide DocStyles survey. **Three questions regarding CSD were asked:**

Q1: In the past year, how many patients did you diagnose with CSD? Responses were grouped into 2 categories: None or ≥1 patient.

Answer Q1: 37.2% of clinicians surveyed had diagnosed at least one case of CSD in the prior year. Pediatricians diagnosed the most cases (47.2%) followed by family practitioners (40.6%) whereas nurse practitioners diagnosed the fewest CSD cases (21.2%). Clinicians who saw some pediatric patients (patients ≤17 years of age) diagnosed more cases that those that did not. Clinicians in the Pacific region diagnosed the most cases (44.2%) whereas those in the mountain region diagnosed the least (27.6%). These authors divided the country geographically differently than we have in our studies where we used zip codes.

Q2: A 16-year-old- female presents with typical CSD signs and you diagnose CSD. What would you do next? Select one: Red is the CDC recommendation.

1. Recommend analgesics and monitor the patient.
2. Prescribe antibiotics and monitor the patient.
3. Recommend analgesics and aspirate the lymph node.
4. Prescribe antibiotics and aspirate the lymph node.
5. None of these.

Answer Q2: Only 12.5% of the clinicians chose the CDC recommended treatment option of **"analgesics and monitoring."** Among all clinicians, **"antibiotics and monitoring"** was the most common choice (71.4%), especially among family practitioners. Pediatricians (20.1%) were the most likely to choose the recommended treatment of **"analgesics and monitoring."** We were happy to see that physicians recommend antibiotic therapy for people with typical CSD as we feel this should help to prevent the infection from becoming more severe with the development of sequelae and inflammation in various organ systems-atypical CSD.

Q3: Cats and their fleas are reservoirs for *Bartonella henselae*. An immunocompromised patient who owns a cat should be counseled to:
Select one: **Red** is the CDC recommendation.

1. Give the cat away.
2. **Avoid rough play with cat & treat for fleas.**
3. Test cat for *Bartonella*/Treat cat if positive.
4. Take no special precautions.
5. Don't know.

Answer Q3: Assessing the knowledge of CSD prevention in an immunocompromised patient, most clinicians (31.2%) chose to recommend **"test the cat for *Bartonella*/treat cat if positive"** rather than the CDC recommended **"avoid rough play with the cat and treat for fleas"** (30.3%). We are happy to see that most clinicians recommend test and antibiotic therapy for infected cats as we also recommend this action since we feel our WB *Bartonella* test and therapy recommendation should be more effective in protecting susceptible immunocompromised people.[13,14]

Conclusions:

We quote the author's conclusions of this paper verbatim. "More than one third of clinicians surveyed reported having diagnosed at least one case of cat scratch disease in the prior year. The overall lack of concordance of survey answers with current CSD treatment guidelines was remarkable. Only 12.5% of respondents correctly chose to treat a hypothetical patient with uncomplicated CSD with analgesics and monitoring, while 71.4% chose to treat with antibiotics. Nevertheless, our findings demonstrate a need for enhanced education and resources for both clinicians and patients regarding CSD treatment in the US."[12]

"Although relatively few clinicians (30.3%) chose the preferred response of **"avoid rough play with cat and treat for fleas"** when confronted with an immunocompromised patient with a cat, the majority of clinicians chose some form of precaution. The most popular option chosen was **"test cats for *Bartonella* and treat cat if positive."**

Editorial Comments:

We are encouraged to see that the CDC has investigated the knowledge of physicians and *Bartonella* diseases. For the past 22 years we have studied cases of *Bartonella* infection in the owners of cats that we have tested. Many of our findings of the geographic distribution of *Bartonella* in cats are similar to those reported in this paper. However, we differ greatly in the recommendation that there is no rationale for testing cats for *Bartonella* and treating those that are positive which is still the recommendation on the CDC *Bartonella* website. *Bartonella* cause many more severe diseases than cat scratch disease.[13,14]

Current CDC Website- *Bartonella* Infection:[5]

Bartonella henselae or cat scratch disease FAQs:

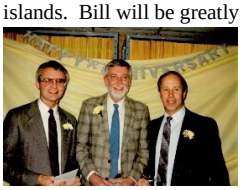
Q. My cat is completely healthy. How can it have an infection? **Answer-** "Some studies have found the *Bartonella* bacteria in the blood of up to 1 in 3 healthy cats, particularly kittens."

Q. Should I get my pet tested and treated for *Bartonella*, just to be safe? **Answer-** "**Testing and treatment is not recommended**, unless your pet is sick. Treating for *B. henselae* can take a long time."

Q. I have a weakened immune system. Should I give my cat away? **Answer-** "If you are living with HIV, are being treated for cancer, or have any other condition that might suppress your immune system, you can keep your cat. **You do not need to test or treat a healthy cat for *Bartonella*."** **We strongly disagree!**

William S. Stockman, V.M.D.

I have again lost a close friend and colleague, Dr. William S. Stockman, a veterinary school classmate, a fellow intern at the Henry Bergh Memorial Hospital of the ASPCA in NYC, and my favorite scuba dive buddy. Bill became the third partner in the Oradell Animal Hospital, the hospital where we obtained important cases of FeLV and *Bartonella* infected cats for our early studies. He was a warm and funny person and a great surgeon. Our families were close for many years and spent many vacations together. Bill was a charter member of the Society of Aquatic Veterinary Medicine. We dove together on more than 10 dive trips and shared many sunset cocktails at anchor off exotic tropical islands. Bill will be greatly missed.



Bill Stockman- left in both pictures

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