The American Holistic Nurses Association (AHNA) supports the Center for Disease Control (CDC) and the World Health Organization (WHO) in acknowledging the immediate global public health risk of the COVID-19.

This update is intended to provide our members with the most accurate and up to date information on the date of issuance.

CLINICAL UPDATES

Disease Progression and Pathophysiology: Prof John Wilson, president-elect of the Royal Australasian College of Physicians and a pulmonologist: WHO says about 80% of people with Covid-19 recover without needing any specialist treatment. Only about one person in six becomes seriously ill “and develops difficulty breathing, almost all feature pneumonia. The lining of the respiratory tree becomes injured, causing additional inflammation…pneumonia caused by Covid-19 tends to affect the entire pulmonary system.”

American Association of Critical Care Nurses has stepped in to fill the knowledge gap for frontline nurses asked to advance their practice for the COVID-19 response. AACN is offering CNE and one webinar. (This week AHNA's resource guide has multiple listings from the site). Though historically, placing a patient in prone position is not used frequently until end-of-life care, evidence is supporting this as best-practice positioning in COVID-19 patients:

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Clinical Trials and Research:

- HHS Funds Phase 2/3 Clinical Trial for Potential Treatment for COVID-19. Regeneron Pharmaceuticals of Tarrytown, New York. The Biomedical Advanced Research and Development Authority will provide support for a US Phase 2/3 clinical trial to evaluate Kevzara as a potential treatment for
• **FDA approves plasma treatment, new vaccine candidates** The Food and Drug Administration (FDA) approved convalescent plasma as part of exploratory treatment for COVID-19 infections, under single-patient emergency Investigational New Drug Applications. "This process allows the use of an investigational drug for the treatment of an individual patient by a licensed physician upon FDA authorization. This does not include the use of COVID-19 convalescent plasma for the prevention of infection."

• In the development of potential COVID-19 vaccines: Clover Pharmaceuticals, Ology Bioservices, and Innovio joined Dynavax in the process.

• **IMPERIAL COLLEGE NPI MODELING** Researchers at Imperial College London, in collaboration with WHO Center for Infectious Disease Modeling, published findings evaluating the impact of social distancing in Europe on SARS-CoV-2 transmission and mortality. Self-isolation, government-encouraged social distancing, banning public events and gatherings, school closures, and mandatory "lockdown" were evaluated. The result estimated that nationwide efforts could have averted 59,000 deaths across the 11 countries and that the national policies could have potentially driven the R0 value to below 1. The study modeled the pandemic through the end of March.

• **ORIGINS OF SARS-CoV-2** There has been a push to better understand the origins of SARS-CoV-2 in order to anticipate and reduce future zoonotic spillover events and transmission. A study published in Nature, https://www.nature.com/articles/s41591-020-0820-9, details the identification of viruses related to SARS-CoV-2 in Malayan pangolins. This animal has been under consideration as an intermediate host of SARS-CoV-2, potentially providing the bridge between primary host animal reservoirs (eg, bats) and humans. Identification of pangolins is important, considering that they are an endangered mammal, trafficked illegally, for food and medicinal purposes. The same study implies the origin of SARS-CoV-2 as natural selection due to 1- its inability to link the unique coronavirus to others within existing lab specimens, and, 2- the unlikelihood that a biological alteration would be developed from a sequence not easily replicated by computer predictions. The coronavirus genomes isolated from pangolins have between 85.5% and 92.4% similarity to the genome of the SARS-CoV-2 virus circulating in humans however, further study is required, particularly in wild pangolin populations.

**GLOBAL SITUATION REPORT**

This morning, 0940 on 3/31/2020, tracking recorded 803,650 confirmed cases: this is 168,815 cases overnight.

COVID-19 Global Cases as of 09:30 Tuesday 3/31/2020.
From 3/30/2020 update

johnshopkins@centerforhealthsecurity.ccsend.com “With COVID-19 spreading exponentially, the Center for Health Security at Johns Hopkins school of Public Health will no longer be including case counts for individual countries or regions;

- Russia’s Ministry of Health reported cases have increased by 50% since March 27th
- Iran reported 41,495 confirmed cases of COVID-19 (3,186 new), including 2,757 deaths. Like many countries, Iran is struggling to balance pandemic response measures, including strict social distancing, against the economic impact of the response: the impact is higher due in part to US sanctions. Iranian President Hassan Rouhani has called for relief from the sanctions and requested a US$5 billion loan from the International Monetary Fund
- In Israel, foreign nationals are restricted from entering the country and individuals are allowed up to 300 feet outside their home. Orthodox Jewish communities, tend to be tight-knit; their slower compliance has increased transmission concerns.
- Jordan, after dozens of guests at a recent wedding tested positive for SARS-CoV-2, Irbid, initiated a large-scale, military controlled lockdown. Individuals cannot leave their homes, the government ensuring the availability of food and water to the population.
- India’s lockdown significantly impacted migrant worker populations, who are now without access to work, critical supplies, and shelter.

Mitigation and Containment

“The measures required to stop transmission completely may be too socially or economically extreme,” Ben Cowling, a professor of infectious disease epidemiology at the University of Hong Kong, tells TIME. “There has to be a balance between protecting people’s lives and their livelihoods.” [https://time.com/5796425/china-coronavirus-lockdown/]

Italy’s full lock down is underway; citizen movement is not being monitored through technology as it was in China, so results will depend upon the adherence from a moral compass rather than government
dictation. The ‘toughest’ lockdowns in the United States still allow residents to move within the city even if within guidelines. When considering if strict mass lockdowns are needed in the U.S.A. Dr. Yvonne Maldonado, Stanford Medicine told TIME that “the rapid rise in recorded case numbers in China may have been a signal that the disease spread unchecked for as long as a few months before being detected” and we (in the USA) have had more time to prepare. In contrast, Wuhan officials were able to continue tracings of the virus through “tens of thousands of contacts” per day whereas the current situation many of the infected are untraceable and cannot state their origin of exposure; this spread should be even more alarming.

**UNITED STATES SITUATION REPORT**

Numbers of affected individuals remain highest in New York, California, Michigan, and Washington, however many states are only testing ‘individuals being admitted’ to the hospital; under-reporting is significant.

The USA has the highest number of confirmed cases 164,785, though not per capita, as of 0930 on 3/31/2020.

There have been 3,173 Covid-19 related deaths.

The CDC reported Monday that 97% of US cases are of unknown origin. Thus far, the USA has 50% more cases than China, and 67% of the deaths; surge capacity has been met in only 3 states.

- March 27, US President Donald Trump signed the CARES Act, the “phase 3” COVID-19 response and funding package to include $1,200 “tax rebates” for individuals, additional $500 rebates for dependents, suspension of payments for federal student loans, tax relief for businesses, funding for healthcare system, and regulatory changes to promote testing and authorization of investigative pharmaceuticals.
Anthony Fauci, MD., recommends to President Trump and the cabinet members, they need to set an example by increasing distance during press conferences, and not shaking hands. He stated that Vice President Pence has been mediating the 10 person or less rule during most meetings and is following guidelines. In his interview with Sciencemag.org, Fauci explains the delicate balance in a complete quarantine of the country for an indefinite time,

“...there’s a compromise. If you knock down the economy completely and disrupt infrastructure, causing health issues, unintended consequences...I've emphasized very emphatically at every press conference, that everybody in the country, at a minimum, should be following the fundamental guidelines. Elderly, stay out of society in self-isolation. Don’t go to work if you don’t have to. No bars, no restaurants, no nothing. Only essential services. But it is felt that if you lock down everything now, you’re going to crash the whole society. So, you do what you can do, as best as you can. Do as much physical separation as you can and ratchet it up at the places you know are at highest risk.”

The American Enterprise Institute published a report by former US FDA Commissioner Scott Gottlieb outlining potential changes to social distancing and other response measures that could be implemented or relaxed and, when it would be appropriate to do so. The report emphasizes the need for improved surveillance and testing, increased public health and health system capacity, preventive and therapeutic care advancements before ceasing to rely on “physical distancing as our primary tool" for combating the pandemic. The "stepwise approach" has 4 phases for relaxing national social distancing measures: slowing SARS-CoV-2 spread, relaxing physical distancing state by state, establishing immune protection (eg, via vaccination) and wholly lifting physical distancing, and rebuilding readiness for future pandemics.

Defense Production Act (DPA) States have reported barriers to obtaining necessary supplies, including bidding against each other and losing contracts to the federal government: centralized control of nationwide distribution could potentially provide more efficient use of limited resources.

Travel Restrictions

The CDC issued a travel advisory “urging residents of New York, New Jersey, and Connecticut to refrain from non-essential domestic travel for 14 days,” essentially asking residents of this affected area to avoid traveling elsewhere.

Florida Governor Ron DeSantis issued several executive orders requiring all travelers arriving from New York, New Jersey, Connecticut, and Louisiana to isolate or quarantine themselves for 14 days after entering Florida. Florida officials will require written documentation of travelers’ purpose and destination in Florida. The local government in the Florida Keys is prohibiting the entry of non-residents by operating checkpoints.

In Rhode Island, Governor Gina Raimondo issued executive orders requiring 14-day quarantine for all travelers arriving from outside the state establishing checkpoints to divert all vehicles with out-of-state license plates for screening and instruction.
Rhode Island National Guard will be going “door to door” in some communities in search of travelers who arrived from New York and issuing them quarantine orders.

Government Action:

- After recent evaluation of the US epidemic, the White House determined that the measures needed to remain in place in order to slow transmission across the country. A number of states and cities have implemented more restrictive and mandatory social distancing programs: national guidelines provide a minimum standard for individuals, families, and businesses nationwide.
- Creating Capacity for Communities in Need Act: the Bill Targets Expedited Healthcare Access and FDA Approvals and would allow physician-owned hospitals to expand their facilities, beds and surgical rooms and provide relief for medical facilities overwhelmed by the surge in patients as a result of coronavirus.
- Supply Shortages- New York Gov. Cuomo asked for 40,000 ventilators immediately, to be prepared for COVID-19 surge over the next 14-21 days. "The new projections suggest that the number of hospital beds needed could be as high as 140,000..the curve is actually increasing." FEMA shipped 2,000 ventilators from the national stockpile to New York state with another shipment of 2,000 ventilators expected. Though New York has by far the most US cases, according to CNN: Louisiana, Michigan, and New Jersey are quickly escalating.
- In New York, a nurse died, and angry co-workers blame a lack of protective gear, New York Times March 26, 2020 https://www.nytimes.com/2020/03/26/nyregion/nurse-dies-coronavirus-mount-sinai.html Ford will partner with General Electric (GE) Healthcare and 3M to make ventilators, respirators, and face shields. Ford said it would be able to make up to 1,000 respirators per month, and plans to make up to 100,000 face shields per week.
- The FDA entered into a Memorandum of Understanding with the Department of Veterans Affairs and the National Institutes of Health, National Institute of Allergy and Infectious Diseases to advance utilization of 3D printing to fill critical supply shortfalls and innovate solutions, including medical products that are manufactured close to the patient, or at point-of-care. (Global Biodefense, 3/29/20)

Covid-19 Surge Concerns

"We shouldn't consider relaxing social distancing measures until we
have slowed the spread, dealt with supply shortages and diagnostic capacity and [are] prepared to deal with patient surges. Dr. Tom Inglesby, MD., Johns Hopkins, USA Today, on March 26th.

Excerpts from Clinicians Biosecurity News, The Increasing Demand for Critical Care Beds—Recommendations for Bridging the RN Staffing Gap, Tener Goodwin Veenema, PhD, MPH, MS, RN; Christopher R. Friese, PhD, RN, AOCN; and Diane Meyer, RN, MPH, March 30, 2020:

"Of the 3.8 million registered nurses nationwide, they are the largest components of the healthcare workforce, vital to the ongoing response, and critical contributors to national health security. However, the United States is already witnessing a shortage of critical care nurses in the pandemic. The rapid surge in COVID-19 cases over the past 2 weeks highlights that, despite concerted efforts in the field, our healthcare system will be strained beyond imaginable expectations... Italy portends what the US is already beginning to see: seriously ill patients requiring care in a system at capacity and depleted healthcare workforce due to employment-acquired COVID-19. Sadly, earlier this month, New York nurse, Kious Kelly died of COVID-19 amid reports that his hospital had run out of protective equipment and had resorted to trash bags as gowns. Difficult, painful decisions may potentially lie ahead regarding allocation of scarce resources. We are in the "acceleration phase" of the COVID-19 pandemic in the United States. We recognize the fluidity of the current situation, the urgent needs, and the absence of high-quality evidence on many essential topics."

Concern exists that the Strategic National Stockpile (SNS), due to be released, will be insufficient to meet anticipated need. The alarming need for bed capacity has been addressed in New York through satellite hospitals for up to an additional 4,000 patients. While the increase in supplies and bed capacity are resourceful, what is less clear is how the healthcare workforce will staff these beds. While some nurses, even the retired, are stepping up and volunteering to return to the work force, the opposite dynamic is true as well.

Recommendations made by the Center for Healthcare Security, http://www.centerforhealthsecurity.org/cbn/, offer advisement for training, and skill requirements for nurses expected to care for COVID-19 patients, and solutions for surge staffing:

- Health system leaders and local authorities should pool existing rosters of registered healthcare workers and solicit availability for emergency reactivation.
- Develop rapid cross-training programs so registered nurses can partner with experienced critical care nurses to learn basic nursing care of ventilated patients.
- Reverse triage (discharge) patients to lower level healthcare facilities
Cohort COVID-19 patients and staff. Divide unit staff into cohorts and establish a consistent staffing pattern to facilitate strong teamwork. Rotate cohorts of nurses to care for confirmed COVID-19 patients. Schedule cohorts to work together (eg, Monday, Thursday, and Sunday) with standardized rest periods. In the event of workplace exposure, consistent teams may limit the spread of infection across more workers.

Redesign duties to reduce face-to-face patient contact and the potential for healthcare worker infection. Reduce nonessential checking of vital signs; draw labs once a day or reduce blood draws in stable patients. Reconsider traditional patient assignment procedures or assign only key personnel to care for patients (eg, assign nursing assistants to specific patients who require their care, not entire cohorts). Deploy extended length intravenous tubing and keep infusion pumps outside of isolation rooms. De-prescribe nonessential medications. Schedule medication administration at specified times. Deploy communication strategies (walkie-talkies, intercoms, baby monitors) to reduce traffic into isolation rooms.

Implement digital health applications and telehealth capabilities for all nursing care using these technologies, limiting the time nurses are in contact with patients. Nursing should be aggressively advocating for the implementation of telehealth and digital resources in the clinical setting.

Large health systems and urban hospitals should consider deploying infection control and critical care nurses to rural and critical access hospitals to train staff on proper infection prevention and control and on care of critically ill and ventilated patients.

The report emphasizes, “More aggressive policy and practical actions to surge the nursing workforce while simultaneously protecting them from infection need to be taken now. Up to date training and PPE are necessary to keep nurses, and all healthcare workers, safe.” Personal Protective Equipment should be the 'basic' right of every front line healthcare worker. Hospitals that are successfully navigating the difficult circumstances are utilizing 'all hands on deck' in any resourceful way possible.

Gaila Palo, MN, ARNP-CNS, AGCNS, CWON-AP

"We have had nurses float to ICUs/CCUs to help with restocking personal protective equipment (PPE), doffing and providing self-care resources, such as water, coffee, tea.. They aren't ICU RNs, but they are available to support. We also have chaplains at home checking in with RNs via Skype, debriefing after codes/tough situations. One psych CNS has been leading three-minute mindfulness exercises during shift huddles. Relaxing some of the rules on medical supply vendors providing food, has provided staff a hot meal from a local restaurant on their lunch breaks. These ways of helping each other have been encouraged by leadership and coordinated by unit managers/leadership, so our needs can be met. Having leaders visible and present once a
These are the 'little' things that make a big difference in chronic stress situations. Staff challenging one another to contests for 'the best mask' décor with a Sharpie, push-ups or stair running, and 'best COVID meme' in the break room have built morale where it would be otherwise exhausted.

Testing Availability and Coordination

The Department of Health and Human Services (HHS) coordinated an emergency international airlift of 500,000 swabs and sample kits with the Department of Defense (DOD). The effort was in response to shipping/distribution barriers caused by border closures and flight cancellations in Europe; Copan Diagnostics in Italy is one of the kit distributors to the United States.

Addressing the Hand Sanitizer Shortage

Two Guidance summaries were developed for the immediate manufacturing of ‘Covid-19’ Grade hand-sanitizer. The FDA’s guidance documents apply only to handrub products prepared using the United States Pharmacopoeia or Food Chemical Codex grade ingredients specifically described in the guidance.

The first method of prevention should still be hand-washing.

- The guidance Temporary Policy for Preparation of Certain Alcohol-Based Hand Sanitizer Products During the Public Health Emergency (COVID-19) is immediately in effect and outlines that the agency does not intend to take action against manufacturing firms that prepare alcohol-based hand sanitizers for consumer use and for use as health care personnel hand rubs during this ongoing public health emergency as described in the guidance.
- The second guidance, Policy for Temporary Compounding of Certain Alcohol-Based Hand Sanitizer Products During the Public Health Emergency, is in effect for the temporary compounding of certain alcohol-based hand sanitizers by pharmacists in state-licensed pharmacies or federal facilities and registered outsourcing facilities, and that these do not require prescription.

Vulnerable Populations

Long Term Care and Retirement Communities

Long-term care facilities are an obvious population for concern in that the initial viral spread was rampant in the elderly and immunocompromised. Centers for Medicare and Medicaid Services (CMS) shared that the preliminary results of an inspection of the US Covid-19 epicenter, Life Care Center, in Kirkland, Washington have produced a new inspection process on a national scale. It includes a pandemic self-assessment tool for residential and skilled nursing centers. Three immediate jeopardy situations were noted; failure to identify and manage illness, failure to report to local public health officials, were not surprising given the novel coronavirus had not yet presented in the US. The final citation; failure to possess a sufficient back-up clinician, after the primary fell ill, is a
The CDC has released interim guidance for the prevention and control of COVID-19 in Long Term Care Facilities and Retirement Communities:

- COVID-19: Guidance Retirement Community Response | CDC

Maintaining the quality of care provided, while following CDC guidance:

**Restrict Visitors per Federal Guidelines.** On March 13, 2020, the Centers for Medicare and Medicaid Services (CMS) released a memorandum directing all nursing homes to restrict visitors except those medically necessary.

**Integrate Medical Reserve Corps or Other Trained Volunteers.** As staff shortages become more pronounced due to staff illness and absenteeism, additional help will be needed to maintain the quality of care residents receive. The Medical Reserve Corps (MRC) includes medical and public health professionals and other trained personnel without medical backgrounds who could assist with a variety of different tasks in LTCFs, including activities of daily living (eg, bathing, toileting, eating) and medication administration. Other volunteers, such as nursing or medical students, might also be used to assist staff. Additionally, these volunteers could help provide emotional support to residents, as they will likely suffer mental health effects as a result of separation from family and interruptions to their regular activities and schedules.

**Cleaning and Disinfection.** LTCFs should be cleaned and disinfected according to CDC guidance using hospital-grade disinfectants. The Environmental Protection Agency has provided a list of products to use against SARS-CoV-2.12

**Reduce Internal Activities.** Facilities should cancel large group activities (eg, exercise classes) and communal dining.

**Personal Protective Equipment.** LTCF staff must be provided with the personal protective equipment (PPE) needed to keep themselves and the residents safe, including gloves, gowns, facemasks, respirators (if available and fit-tested), and eye protection. According to the CDC, for known or suspected COVID-19 cases, respirators (eg, N95 masks) should be “prioritized for procedures that are likely to generate respiratory aerosols” (such as collecting respiratory specimens) and “facemasks are an acceptable alternative when the supply chain of respirators cannot meet the demand. Staff should receive training on how to select, don, and doff PPE, and they should demonstrate competence before being allowed to return to work. It is important to note that the presence of PPE may frighten residents, particularly those who are cognitively impaired. Staff should introduce themselves at the resident’s doorway prior to donning PPE and notify the resident that they will be
Implement a LTCF Help Line. State health officials should provide LTCFs with a dedicated call line to answer questions or concerns about COVID-19 in LTCFs.

Encourage Family to Take Residents Home, if Possible. Family or friends who can temporarily take care of a resident at home should consider doing so. This should only be done if they are confident that they can safely take care of the resident for an extended period.

Child Endangerment [https://www.nytimes.com/aponline/2020/03/28/us/ap-us-virus-outbreak-child-welfare.html] Due to school closings for COVID-19, children will potentially have an increased online presence and/or be in a position that puts them at an inadvertent risk. The FBI warns parents, educators, caregivers, and children about the dangers of online sexual exploitation and signs of child abuse. Parents of children already in foster care are missing weekly visits and slowdowns at family courts are burdening some of those parents with agonizing delays in getting back their children. The impact of job instability will prevent this as well. Local food donation sites have been set up throughout major cities where impoverished children receive all their daily nutrition from the school lunch program. State agencies for children and families, though seeking to limit the virus’s spread, have cut back on in-person inspections at homes of children considered at risk of abuse and neglect. Many child welfare professionals worry the pandemic, by increasing stress on already fragile families, lacking stable housing, income, and a mental health challenge or a substance abuse problem, will fuel a rise in child abuse and neglect. Emergency room staff will need to be wary of increases in numbers of suspected domestic and child abuse.

Refugees

“Refugees are uniquely at risk of experiencing severe illness and death. Yet many countries’ pandemic plans—including countries hosting large numbers of refugees, migrants, and displaced persons—do not explicitly account for the complex needs of this population during such a health crisis,” Sanjana Ravi, MPH. United States President Trump, has specifically targeted these individuals for removal to either their home country or country of origin. Around the globe, from Malaysia, to Turin, Italy, other countries have made accommodations to migrants. In Germany, migrants have stepped into fill shortages in healthcare workers. [https://www.unhcr.org/en-us/news/stories/2020/3/5e79e2410/live-blog-refugees-covid-19-crisis.html]

Tribal Communities

Funding to Tribes for COVID-19 Response: March 22nd, President Trump signed the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121-5207 (the “Stafford Act”) citing “To date, 50 States, the District of Columbia, 3 territories, 4 tribes, and 1 tribal nation have also declared emergencies as a result of the outbreak”. California, New York, and Washington, together with FEMA, enlisted the response of the National Guard with 100% government repayment for emergency activities. This left the tribal communities without immediate assistance. In response, The Department of Health and Human
Services (HHS) and the Centers for Disease Control and Prevention (CDC) will provide $80 million in funding to tribes, tribal organizations, and Urban Indian Organizations for resources in support of our nation’s response to the 2019 novel coronavirus (COVID-19). This initial action, followed by the newly signed, Families First Coronavirus Response Act law, serves additional funding to Indian Health Service COVID-19 testing.

Obstetrics

At this point there are no listed special concerns for this population. The CDC published Interim Considerations for Infection Prevention and Control of 2019 Coronavirus Disease 2019 (COVID-19) in Inpatient Obstetric Healthcare Settings, https://www.cdc.gov/coronavirus/2019-ncov/hcp/inpatient-obstetric-healthcare-guidance.html Until further information is available, some obstetricians are electing to limit in office examinations to third trimester patients and those in high-risk pregnancy groups.

For those trying to conceive, research is still ongoing and there have not been any studies done to see if contracting the COVID-19 infection now will make it harder to get pregnant later. There is no medical reason to change fertility plans, however, medical care may be more difficult to access. It is logical then for older women, or those with history of complicated birth, to consider delaying pregnancy. The American Society for Reproductive Medicine (ASRM) recommends that clinics postpone all elective procedures, including intrauterine insemination (IUI), in-vitro fertilization (IVF), and non-urgent egg or embryo freezing. If you’re a patient going through IVF or IUI, you should speak to your fertility clinic about next steps. For women not currently being seen for fertility care, it is not necessary to have eggs or embryos frozen, Dr. Eva Luo, an OB-GYN at Beth Israel Deaconess Medical Center, says, “Nothing in what we currently know and understand about COVID-19 would justify egg freezing or other ART procedures.”

Everyone, including pregnant women, should be exercising precautions to avoid infection.

Infants and Pediatrics

Infants and children are carriers, and typically experience mild symptoms when infected with COVID-19. The first infant death related to COVID-19 in the United States was reported in the Chicago area on March 28. It is unknown if the child had other pre-existing health conditions.

Though significant mortality is noted primarily in adults, doctors are realizing that no age group is immune to the virus nor to its severe health effects. The age of the deceased infant, has not been released. This is the second known death of an infant confirmed to have COVID-19. In China, a 10-month-old with the disease, died 4 weeks after admission to the Wuhan Children's Hospital, according to the New England Journal of Medicine. A study by the CDC in China covered the epidemiology and transmission patterns of COVID19 in 2,143 pediatric patients from January 16-February 8, 2020. Over 90% of all patients were asymptomatic, mild, or moderate cases, generally symptoms were milder than those of adults, however, young children, particularly infants, were more vulnerable to infection. Patient gender did not determine outcome or severity.

https://pediatrics.aappublications.org/content/pediatrics/early/2020/03/16/peds.2020-0702.full.pdf
Resources

Self-Care Resources

AHNA
https://www.ahna.org/Home/Resources/Stress-Management

https://www.holliblunurses.com/
"Restore" section for meditations and breathwork designed for nurses before, during, and after shifts: https://www.holliblunurses.com/restore

Infection Prevention
Infection Prevention and Control: Critical Role of the Bedside Nurse

Covid-19 Education
Professional Development Nurses Respond to the COVID-19 Crisis
Coronavirus (COVID-19) Update—Cross training to treat

Pulmonary Care Education - AACN
Evidence-Based Early Recognition and Management of ARDS Drives Outcomes: The Why and How
Standard vs. Alternative Vent Modes: What’s the Difference?
Extracorporeal Life Support: RN Management of ECMO Patients
The American Institute of Homeopathy is hosting a free 90-minute webinar for physicians and nurses this Saturday, April 4 at 1:00 pm: Case Management of the Influenza and Pneumonia Patient with Homeopathy During the COVID-19 Pandemic. https://zoom.us/meeting/register/vJQpd-uhrD8qLCEtii7Nw9rFSp_ZV076IA?fbclid=IwAR0nUFoQx9LdtOvd1Hr_ROWqHsWzr8ta584cQQVHWl9sZ8hUC-G6J8kJp9Y

Practice Resources:
Diagnostic Testing for COVID-19 (PDF)
Ventilator Stockpiling and Availability in the US (PDF)
Serology testing for COVID-19 (PDF)
Pandemic | Ready.gov

Research:
https://nextstrain.org/ Real Time data on the current 8 COVID19 viral strains
COVID-19 spread in real-time. Center for Health Security Covid-19 Tracking from Johns Hopkins
Coronavirus Disease 2019 (COVID-19) Peer-Reviewed Publications (list maintained by the CDC)

Advocacy:
AACN Presidents Talk About Everything From Bandanas to Advocacy for PPE

Economic Resources:
Financing for epidemic response activities (PDF)
Reputable Information and News:

Johns Hopkins Coronavirus Resource Center
Preparedness Pulsepoints USG response
https://myemail.constantcontact.com/Preparedness-Pulsepoints.html?sid=1107826135286&aid=v-yDnZ3ccis
Hospitals scramble to keep up with CDC N95, mask guidance feat. Amesh Adalja, MD from Center for Infectious Disease Research and Policy
Health Security: Strategies to Inform Allocation of Stockpiled Ventilators to Healthcare Facilities During a Pandemic
US coronavirus death toll hits 300 as more states urge residents to stay home feat. Eric Toner, MD
In hard-hit areas, testing restricted to health care workers, hospital patients feat. Jennifer Nuzzo, DrPH
coronaviruses, outbreak preparedness and response, infection control, and public health policy 10 articles on Health Security from Johns Hopkins