9.11
WTC Health Program

## **RESPONDER NEWS**

Spring 2021



Dear Responders,

Welcome to our Spring newsletter. As the days get longer and many members of our community become vaccinated, we are hopeful about returning to normalcy in our lives.

We have been very busy here at the Stony Brook Clinical Center of Excellence. We hit a milestone this past March by seeing nearly 1,000 members for monitoring. We are glad to see that you are making your annual visits to our clinic. It is so great to see each and every one of you in person!

In the pages ahead, you will read about important WTC Health Program changes and announcements. First, the Program started a trial program for new CPAP users. The purpose is to assure high quality of care, compliance and support during the first 6 months of CPAP use. Second, you may have noticed our continued move towards a more electronic world! The pandemic taught us that patient portals really do provide the best way to collect and store your medical data, so please make sure you are enrolled (details on pg. 2). Third, we have important reminders for you about prior authorizations and their important role in ensuring you can access benefits through the Program. Finally, as a Clinical Center of Excellence, we work to incorporate new research and health information to help you live a healthier lifestyle. Please see our articles about high blood pressure, and latest WTC research updates to learn more.

In closing, we wish you and your families a lovely springtime. The weather is warming up so we sincerely encourage you to get outside, go for walks and enjoy the beauty that Long Island has to offer!

Warmly,

The Stony Brook WTC Health and Wellness Team

#### **Prior Authorizations**

Prior Authorizations are required <u>before</u> undergoing any services beyond your initial referral. Coverage without prior authorization is difficult and not quaranteed.

Many authorizations require additional records from your WTC treating provider.

This is why it is essential that you notify us at least 2 weeks ahead for our care coordination team to ensure everything is in place **PRIOR** to the service.

#### **Care Coordination**

Our care coordination team makes sure that your WTC benefits are wellcoordinated, so please help them further ensure the following:

#### **ER and Hospital Admissions**

Please notify us within 24 hours of your visit.

If you have a Program ID card, show it to the admitting staff at the ER or hospital so NIOSH is properly notified.

#### **COVID** testing

A prior authorization is necessary if you need COVID tests before a WTC visit or procedure. Please call us before you set your appointments.



Patient Portals are a quick way to access your WTC records, see your results and communicate with us!



#### **Stony Brook's Patient Portal**

https://www.stonybrookmedicine.edu/MyHealtheLife

- Send and receive secure emails and private health information
- Schedule appointments
- ♦ Keep track of your benefits
- Directly access your medical information, visit summaries and test results
- ♦ Request refills for your medications

Trouble registering? Call Stony Brook Tech Support: 877-621-8014



Questions?
Contact Stony Brook WTC Health and
Wellness Member Services:
631-855-1200



# WTC Health Program Announcement: Sleep Apnea Treatment

Is your Sleep Apnea WTC certified?

If so, your provider may prescribe Continuous Positive Air Pressure (CPAP) or Bilateral Positive Airway Pressure (BIPAP) therapy. Both CPAP and BIPAP are leading effective sleep apnea therapies.

When used as directed, CPAP and BIPAP can provide the following benefits:

- More energy and reduced daytime sleepiness
- Better chances of lowering your blood pressure
- Decreased risk of cardiovascular events
- Contribute to positive health benefits

Sleep apnea therapies use trials because CPAP/BIPAP and other sleep apnea devices must be personalized, such as by proper fit and other types of adjustments. Your doctor can work with you to help find the right option for your needs.

Prescribed CPAP or BIPAP trials require you to use the device at least 3-4 hours per night, 4 or more days a week. The requirement is often referred to as adherence. Adherence is critical to ensuring the treatment has been given a fair effort and can have the best chance at improving your health and wellness.

A CPAP trial before exploring other sleep apnea therapies may be required. However, we at Stony Brook WTC Health and Wellness will explore other treatment options with you if you are unable to complete your CPAP trial.

More information about sleep apnea coverage in the WTC Health program can be found here: www.cdc.gov/wtc/ppm.html#medical sleep apnea

Please also visit www.cdc.gov/wtc/clinics.html

Reach out to Stony Brook WTC Health and Wellness Member Services if you have questions:

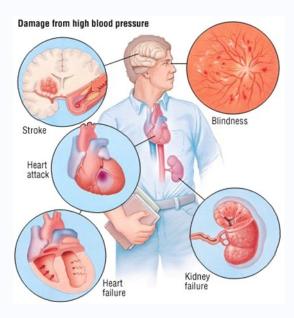
631-855-1200



## HYPERTENSION: A MATTER OF THE HEART

**Hypertension (high blood pressure)** is a chronic health condition. Although high blood pressure (BP) is not a condition specifically treated by the WTC Health Program, it is an important health issue to pay attention to because high blood pressure can be dangerous and causes enormous stress on your heart and other organs. If you have high blood pressure, we urge you to discuss with your primary care provider. Left untreated, high BP can put you at greater risk for heart attack, heart failure, stroke, kidney failure and aneurysm.

BP readings measure resistance the heart faces while trying to pump blood throughout the body. Systolic BP measures the pressure of heart contractions while beating. Diastolic BP measures the heart's relaxed state pressure between heart beats. A normal systolic BP ranges between 100-120, while a normal diastolic BP ranges between 60-80. An ideal BP is 120/80. For example, BP readings of 140/90 is considered high.



#### Various factors increase your risk of developing **High BP**

- Aging
- Genetic and family history
- Certain medications. This includes over-the-counter decongestants, aspirin and ibuprofen
- Certain medical conditions: Tumors, sleep apnea, chronic kidney disease, and thyroid problems
- Lifestyle risks: Obesity, high salt intake, smoking, excessive alcohol use, lack of exercise, and lack of sleep

#### **How Can I Manage Hypertension?**

- Eat heart healthy foods (ex. vegetables, legumes, lean meats, fruits). Reduce your salt intake, and avoid high sodium packaged and processed foods.
- Consume potassium-rich foods (ex. bananas, spinach, beans, potatoes, coconut water, etc.)
- Exercise at least 30 minutes per day, 4-5 days a week
- Lose weight if you are overweight. Research has shown that losing only 3-5% of the body weight can improve BP readings
- Quit smoking
- Reduce alcohol intake
- Exercise or meditate to help reduce stress
- Try to get at least 7 hours of sleep every night



#### Be Prepared to Discuss your BP with Your Primary Care Physician

- Take a BP log with you when you meet your primary care provider or cardiologist. Monitor your BP at home with a portable machine and keep a log of it. This will help your doctor monitor and adjust your treatment.
- **Keep your medication with you**. Providers and pharmacists often remind patients to keep BP medication(s) on them and take doses on time. Remember: Unless your provider says otherwise, it is okay to take your meds while fasting for blood work.
- If necessary, take your medication before your medical appointment. Many people get anxious when being seen by a provider or a nurse. This is called "white coat syndrome" and can temporarily elevate your BP. Your provider may remind you to take your BP medicine before your appointment to help avoid this situation.
- Keep regular visits with your primary care provider, cardiologist and anyone else helping you manage your BP as we continue to monitor and treat your WTC condition. If you are not yet ready for in-person visits, then take advantage of any telehealth visit options your provider makes available. It is very important for you to not miss your medical appointments.

#### When to Call for Help?

An elevated BP reading of 160-180 or above can be dangerous and require immediate attention.

Extremely high BP can cause stroke, heart attack, or lead to other cardiac emergencies. Call 911 if this high reading is accompanied with any of the following symptoms:

- Severe headache
- Sudden chest or upper body/back pain
- Upper abdominal pain/discomfort
- Visual changes
- Facial drooping or limb (arms/legs) drifting
- Develop difficulty breathing

High BP can also show no symptoms, but can still cause organ damage if not controlled. We at the Stony Brook WTC Health and Wellness program encourage making simple lifestyle changes that put you in control of your blood pressure because, in truth... it's all a matter of your heart!



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# Research Updates

Our Stony Brook WTC Health and Wellness Program maintains its scientific edge and excellent standard of care by investing in research. You may recall being asked to participate in research activities during your visits. Your involvement is integral to providing us with information that will help us understand the short and long-term effects of 9/11 exposure to improve the health care and services we offer members.

### **Below are Highlights of our Latest Research**

Interested in participating in WTC responder focused research projects? Please call us for more information!

#### **Epidemiology of COVID-19 Infection on Long Island**

"...there were lower COVID-19 infection rates on Long Island in the spring and summer of 2020 [than reported]."

New York City and Long Island were early epicenters of the US COVID-19 epidemic. Researchers investigated the epidemiology of COVID-19 from January to August 2020 among 9,736 middle-aged World Trade Center responders residing on Long Island. Various data collection methods were used: E-mails, text messages, telephone calls, and telehealth visits. The data indicated that about 10% of WTC responders on Long Island had been infected with SARS-CoV-2 by the end of August 2020. Disease severity varied substantially in this population: 20–45% had no symptoms, while about 5% experienced severe disease that required hospitalization. One percent of infected responders died. These results suggest that there were lower COVID-19 infection rates on Long Island in the spring and summer of 2020 than previously reported.

#### Post-Traumatic Stress Disorder (PTSD) and Sleep

"Daily PTSD contributed to shorter sleep and worse sleep quality later in the night."

This study examined relationships between PTSD and sleep in responders across one-week intervals. Researchers concluded that PTSD symptoms and sleep are related to one another. Daily PTSD symptoms contributed to shorter sleep and worse sleep quality later in the night. The opposite was also true- shorter sleep led to more PTSD symptoms the next day. The key takeaway is better sleep can improve PTSD and the treatment of PTSD can improve sleep.



\*\*Read about the benefits of CPAP therapy to improve sleep apnea symptoms associated with PTSD on page 3 of this newsletter\*\*

Morozova, O., Clouston. S., Valentine. J., Carr, M., Luft. B.J. (Under Review 2012). COVID-19 cumulative incidence, asymptomatic infections, and fatality in Long Island, NY, January – August 2020: A cohort of World Trade Center responders.

Dietch, J.R., Ruggero, C.J., Schuler, K., Taylor, D. J., Luft, B.J., & Kotov, R. (2019). Posttraumatic stress disorder symptoms and sleep in the daily lives of World Trade Center responders. *Journal of Occupational Health Psychology, 24*(6), 689–702. <a href="https://doi.org/10.1037/ocp0000158">https://doi.org/10.1037/ocp0000158</a>

## Health-Related Behaviors, Post-Traumatic Stress Disorder (PTSD), and Respiratory Illness

"...better sleep and greater physical activity may help people with PTSD avoid respiratory problems."

Stony Brook WTC Health and Wellness Program researchers have also examined post-traumatic stress disorder (PTSD), anxiety, stress, sleep, and respiratory illness in WTC responders every day for two-week intervals. It was found that poor sleep, inactivity, and daily stress contributed to both PTSD and respiratory symptoms. The implication is that better sleep and greater physical activity may help people with PTSD avoid respiratory problems. Our Clinical Center of Excellence encourages lifestyle changes to help achieve these health goals that can reduce stress, improve sleep, and increase physical activity.

#### Mild Cognitive Impairment

"...viral infections and inflammation may play an important role in [Alzheimer's Disease]..."

There has been an increasing awareness that WTC first responders who worked at the disaster site are showing symptoms consistent with mild cognitive impairment (MCI) at midlife, a common precursor of Alzheimer's disease (AD). In a recent publication by a research team at the Stony Brook WTC Health and Wellness Program, a gene signature associated with MCI in monocytes at single-cell resolution using the cutting-edge CITE-Seq technology was identified. These genes were involved in processes associated with viral infections and inflammatory responses, suggesting that viral infections and inflammation may play an important role in AD etiology. The findings also suggested that monocytes may constitute a key cell type to target in research for blood-based biomarkers studies for early detection of AD risk and development of potential interventional approaches.

#### **Cognitive and Physical Aging**

"...responders experiencing flashbacks and/or nightmares as a result of WTC exposures were more likely to have signs of both physical frailty and cognitive impairment."

Our researchers think that some WTC responders might be aging at more rapid rates. The presence of post-traumatic stress disorder (PTSD) is one possible reason. Recently, they reported that people with PTSD had difficulties with physical functioning. Not only were responders with PTSD slower to get out of a chair, but their grip strength was weaker as well. One reason for muscle weakness and slowed movements is brain aging. A hallmark of an aging brain is memory loss, so our researchers assessed whether responders with these signs of physical frailty also showed problems with memory. The results were intriguing. It was found that responders experiencing flashbacks and/or nightmares as a result of WTC exposures were more likely to have signs of both physical frailty and cognitive impairment. Also, people with PTSD more commonly had physical frailty, and potentially at an earlier age, than cognitive decline. However, when physical effect was accounted for, longer exposures at the WTC disaster site were also associated with higher risk of cognitive impairment. These results suggest that responders with chronic PTSD may have increased risk of deficits beyond age-expected impairment that are identifiable by the emergence of physical and cognitive limitations as they age.

Diminich, E.D., Clouston, S.A.P., Kranidis, A., Kritikos, M., Kotov, R., Kuan, P., Carr, M., Bromet, E.J. and Luft, B.J. (2021), Chronic Posttraumatic Stress Disorder and Comorbid Cognitive and Physical Impairments in World Trade Center Responders. *Journal of Traumatic Stress, 1-12.* <a href="https://doi.org/10.1002/jts.22631">https://doi.org/10.1002/jts.22631</a>

Kuan, P-F, Clouston, S., Yang, X., et al. (2021). Single cell transcriptomics analysis of mild cognitive impairment in World Trade Center disaster responders. *Alzheimer's Dement*. 2021; 13:e12154. <a href="https://doi.org/10.1002/dad2.12154">https://doi.org/10.1002/dad2.12154</a>

Waszczuk, M. A., Ruggero, C., Li, K., Luft, B. J., & Kotov, R. (2019). The role of modifiable health-related behaviors in the association between PTSD and respiratory illness. Behaviour Research and Therapy, 115, 64–72. <a href="https://doi.org/10.1016/j.brat.2018.10.018">https://doi.org/10.1016/j.brat.2018.10.018</a>



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