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CLINICAL GUIDELINES FOR ADULTS EXPOSED TO THE SEPTEMBER 11TH ATTACKS ON THE WORLD TRADE CENTER

- More than 20 years after the September 11, 2001 (9/11) attacks, people continue to experience disaster-related physical and mental health conditions.
- Ask people who may have been present at the World Trade Center site about their exposures, especially those with respiratory symptoms, chronic rhinosinusitis, gastroesophageal reflux, cancer, chronic pain, psychiatric symptoms, and substance use disorders.
- Know how to evaluate, diagnose, and treat people with conditions that could be related to exposure to the 9/11 attacks and the aftermath.
- Take a coordinated approach to care and refer people to health centers affiliated with the World Trade Center (WTC) Health Program, which all offer multidisciplinary care.

The terrorist attacks of September 11, 2001 (9/11) exposed nearly a half million people in New York City (NYC) to airborne toxins that have not been fully characterized.[1] Many individuals who were present at or near the disaster sites were also exposed to psychologically traumatizing scenes and events and experienced the stress of job loss or displacement from their communities.[1] The physical and mental health effects of these exposures have persisted among people who were at or near the site of the attacks or were affected by the attacks.[1,2]

This CHI will focus on identifying and treating people with conditions that could be associated with NYC-based exposures to the 9/11 attacks and their aftermath. Encourage affected individuals to contact the World Trade Center (WTC) Health Program to determine if they are eligible for health services with no out-of-pocket cost (**Box 1**[1,3] and **2**[3-6]**)**.

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PHYSICAL HEALTH CONDITIONS

The 9/11 attacks on the WTC released a mixture of irritant dust, smoke, products of combustion, and carcinogenic and gaseous materials, such as pulverized concrete, glass, plastic, paper, and wood, that have never been completely characterized.[1] The dust cloud also contained heavy metals, asbestos, and other carcinogens. The smoke lasted more than 13 weeks.[1] The nature of both indoor and outdoor dust exposures varied by date and location.[1] Dust that settled indoors

retained its alkalinity to a greater extent than outdoor dust, which was exposed to rain.[1]

Chronic rhinosinusitis is the most frequent adverse physical health effect among people exposed to the 9/11 attacks.[4,7]

- Signs and symptoms: Nasal congestion, rhinorrhea or postnasal discharge, facial pain or pressure, and hyposmia or anosmia.
- Evaluation: Duration for at least 12 weeks of at least 2 symptoms, and endoscopic or radiographic evidence of sinonasal inflammation or polyps or of mucopurulent draining from paranasal sinuses or outflow tracts.
- Management: See **Box 3**[4,7].

Asthma is the third most common noncancer certification among 9/11 responders and survivors.[8] Although many developed new asthma symptoms in the period following exposure, some had preexisting or childhood asthma with symptoms that worsened after exposure.

- Signs and symptoms: Wheezing, shortness of breath, chest tightness, and cough.[8]
- Evaluation: Spirometry, possibly bronchoprovocation, peak flow monitoring, exercise studies, symptoms, medical history including response to anti-inflammatory therapy, and physical examination.[8,9]
- Management: Controller medication and rescue inhaler(s) (including an inhaled corticosteroid),[9,10] stepping up treatment as needed; trigger avoidance; smoking cessation; weight management; and asthma action plan.[8,9] See 2024 Global Initiative for Asthma Report for detailed guidance.

Interstitial lung diseases (ILDs) observed with 9/11 responders and survivors include the most common clinical presentations observed in the general population, such as idiopathic pulmonary fibrosis (IPF), nonspecific interstitial pneumonia (NSIP), fibrotic hypersensitivity pneumonitis (HP), fibrosing sarcoidosis, and connective tissue disease-associated ILD (CTD-ILD).[11]

- Signs and symptoms: Shortness of breath, dry cough, and chest discomfort.[11,12]
- Evaluation: Physical examination, assessment of symptoms, potential exposures, medications, comorbidities and their treatments, family history, complete pulmonary function test including diffusing capacity, and possible high-resolution computed tomography. Accurate diagnosis, appropriate use of surgical lung biopsy, and effective pharmacotherapy

BOX 1. THE WORLD TRADE CENTER HEALTH PROGRAM[1,3]

The World Trade Center (WTC) Health Program provides health care at no out-of-pocket cost for certified WTC-related health conditions. For those in the New York metropolitan area, health surveillance and medical care are provided at 8 Clinical Centers of Excellence (CCE). The CCEs use an integrated and multidisciplinary approach to provide physical and mental health services.

If your patient was exposed to the September 11, 2001 (9/11) attacks, monitor them for

- persistent cough or wheezing,
- long-standing and constant runny or stuffy nose,
- long-standing and chronic heartburn or acid reflux,
- anxiety, depression, and other trauma-related symptoms (eg, insomnia, nightmares), and
- harmful substance use.

If your patient shows these symptoms or is diagnosed with any of the conditions in **Box 2**, encourage them to visit the WTC Health Program website at www.cdc.gov/wtc to see if they are eligible to apply.

See 9/11 Health Information for Health Care Providers.

BOX 2. PHYSICAL HEALTH CONDITIONS RELATED TO THE SEPTEMBER 11, 2001, ATTACKS[3-6]

- Asthma
- Cancer
- Chronic obstructive pulmonary disease/chronic bronchitis
- Chronic pain
- Chronic rhinitis and sinusitis
- Gastroesophageal reflux disease/laryngopharyngeal reflux disease
- Interstitial lung disease
- Obstructive sleep apnea

BOX 3. CHRONIC RHINOSINUSITIS TREATMENT[4,7]

- Nasal spray/irrigation
- Topical antihistamine such as azelastine or systemic antihistamines; consider nasal steroids if no improvement
- Be alert to signs of bacterial superinfection
- Refer to specialist for persistent symptoms

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usually require multidisciplinary discussion, which includes pulmonologists, radiologists, and pathologists.[11]
- Management: Smoking cessation, weight management, exposure avoidance, vaccinations, management of comorbidities, immunosuppressive medications for some fibrotic ILDs, supplementary oxygen, and pulmonary rehabilitation if needed.[11]

Gastroesophageal reflux disease (GERD), the second most common condition certified for treatment by the WTC Health Program, often co-occurs with asthma or lower respiratory disease, posttraumatic stress disorder (PTSD), and overweight and obesity.[13]

- GERD signs and symptoms: Substernal burning sensation starting in the epigastrium and moving upwards toward the neck, food regurgitation, chest pain, dysphagia, chronic dry cough, pharyngitis, hoarseness, and bronchospasm.[13]
  - Laryngopharyngeal reflux disease (LPRD) signs and symptoms: Hoarseness/vocal changes, sore throat, repeated throat clearing, dysphagia, excessive mucous, cough, lump-in-throat sensation, and possible erythema on endoscopy.[14,15]
- Evaluation: History, physical examination, trial of proton pump inhibitors (PPIs), and endoscopy if no response to PPIs or if symptoms recur after discontinuing PPIs.[13]
- Management: See **Box 4**[13].

Obstructive sleep apnea (OSA), a chronic medical condition with recurrent episodes of partial and complete upper airway collapse during sleep, may be present in up to 75% of WTC Health Program members, but in 17% to 50% of the general population.[16,17]

- Signs and symptoms: Snoring, choking, or gasping during sleep, dry mouth on awakening, morning headache, acid reflux, and daytime sleepiness.[16,18]
- Evaluation: Assessment of risk factors (hypertension, male sex, age >50 years, large neck size, body mass index ≥30 kg/m^2, and family history of OSA), or the STOP-Bang or Berlin Questionnaire (**Resources**).[18] Diagnostic testing performed via in-lab polysomnography or home sleep apnea testing.[17,18]
- Management: Weight loss counseling, sleep hygiene (eg, positional therapy, mandibular advancement devices, and continuous positive airway pressure devices), referral to a sleep medicine specialist for definitive diagnosis and treatment for patients with severe symptoms.[18] The majority of persons with OSA have mild symptoms that often require no treatment.[16,17]

Chronic obstructive pulmonary disease (COPD) is defined as persistent airflow limitation and is usually progressive.[19] Exposures to particles and gas during the 9/11 attacks may have the potential to cause or exacerbate COPD.[20]

- Signs and symptoms: Shortness of breath, chronic cough, and sputum production.[20]
- Evaluation: History, symptoms, risk factors (eg, smoking, exposure to environmental tobacco smoke, environmental and occupational exposures), spirometric diagnosis of obstruction, and additional pulmonary function or imaging studies if needed.[20]
- Management: Smoking cessation, weight management, healthy diet and physical activity, vaccinations, exposure avoidance, stepwise treatment with bronchodilators, inhaled corticosteroids, phosphodiesterase inhibitors, and oxygen therapy if needed.[20]

Chronic pain (duration of >3 months)[21] is associated with anxiety sensitivity and other mental health disorders,[6,22] which often occur in people who were exposed to the 9/11 attacks and 9/11 responders who suffered musculoskeletal injuries.[5,23]

- Evaluation: Patient report.

BOX 4. MANAGEMENT OF GERD/LPRD[13]

Diet and lifestyle changes

- Weight loss
- Elevating the head of the bed
- Tobacco smoking and alcohol cessation
- Staying upright after meals and not sleeping with the right side down
- Avoidance of late-night meals and snacks and known food triggers such as foods with high fat content, caffeine-, gas-, or alcohol-containing beverages, chocolate, and spicy or acidic foods

Pharmacologic management

- Proton pump inhibitors[a] (PPIs)
- Histamine 2 reducing agents (H2RAs)

GERD, gastroesophageal reflux disease; LPRD, laryngopharyngeal reflux disease.

[a]PPIs are more effective for heartburn and regurgitation symptom relief and healing compared with H2RAs.

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- Management: Nonopioid approaches such as behavioral treatment (eg, meditation and exercise therapy), gabapentin for neuropathic pain, oral analgesics, anti-inflammatory agents, and corticosteroids.[21]

Cancers associated with the 9/11 attacks include prostate, thyroid, and melanoma.[24] The WTC Health Program provides treatment coverage for all qualifying cancers.

- Screening: Screen for lung, colorectal, cervical, and breast cancer according to accepted guidelines (**Resources**).[24]

MENTAL HEALTH CONDITIONS

Health care providers serve a key role in screening, evaluating, and referring individuals who report 9/11 exposure and present with psychiatric symptoms (**Box 5**[25-33]).

The 9/11 attacks exposed thousands to severe, psychologically traumatic experiences, resulting in a wide range of adverse mental health effects. Those present at the WTC site on 9/11 directly witnessed the sudden deaths of loved ones and coworkers, feared for their own lives, suffered personal injury, and viewed terrifying scenes. Persons who remained at the WTC site as part of the disaster response or who lived, had jobs, or went to school in the area experienced ongoing exposure to scenes of destruction and terror.[1,23] Many people were displaced from their homes, lost jobs, and experienced economic hardships.[1,23]

Social determinants of health, such as safe housing and neighborhoods, are known to contribute to health inequities[34] and likely influenced illness prevalence and trajectory for WTC cohort subgroups. Populations with a history of adverse childhood events may be more vulnerable to the psychological consequences of traumatic events.[35] Greater barriers to health care access and higher psychosocial burden are associated with structural inequities such as racism and fewer socioeconomic resources.[34] These factors often lead to unemployment, less social support, and lower educational level, which are all associated with increased severity and persistence of PTSD and depression in WTC trauma-exposed populations.[23,35-38]

Posttraumatic stress disorder

PTSD is the most diagnosed mental health condition in the 9/11 cohort.[23] The prevalence varies substantially among subgroups and is significantly higher among responders (ie, rescue, recovery, and restoration workers) who performed tasks not common for their occupation, such as construction workers, asbestos removers, and workers who participated in general clean-up of the disaster site. In the WTC survivor cohort (ie, residents, students, and occupants of the WTC towers and nearby buildings), risk factors for PTSD include Hispanic ethnicity, low income, having a high school education or less, exposure to the WTC dust cloud, and comorbid lower respiratory and mental health symptoms.[23]

- Signs and symptoms: Intrusive, involuntary recurring thoughts or images of the traumatic event; persistent avoidance of associated stimuli; negative changes in cognition and mood; and marked change in state of arousal and reactivity.[23]
- Evaluation: If a patient indicates a trauma history, screen for possible PTSD using the Primary Care PTSD Screen (**Box 6**[39,40]). Those screening positive may require further assessment for diagnosis. Consider referring to a mental health professional.[23]
- Management: Trauma-focused psychotherapy, including cognitive processing therapy, cognitive behavioral therapy, prolonged exposure therapy, and eye movement desensitization and reprocessing therapy, have the strongest evidence base and are considered first-line treatment.[23,40,41] Pharmacotherapy with selective serotonin reuptake inhibitors and other agents for the treatment of PTSD is also effective at targeting specific symptoms as well as comorbid disorders.[23,40,41]

Generalized anxiety disorder

Generalized anxiety disorder (GAD) is characterized by persistent, excessive, and uncontrolled worry.[42,43]

- Signs and symptoms: Uncontrollable worry and anxiety about daily life and routine activities; feeling restless; being easily fatigued; difficulty concentrating; irritability; and muscle tension unexplained by other causes.[30,42,43]
- Evaluation: GAD-7 screen (**Box 7**[30]).
- Management: Cognitive behavioral therapy, pharmacotherapy.[43]

Major depressive disorder

Exposure to the 9/11 attacks is associated with increased risk of depression, particularly among individuals who directly witnessed the attacks or participated in the rescue and recovery efforts.[36]

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- Signs and symptoms: Feelings of extreme sadness, marked loss of interest or pleasure in activities, functional impairment; problems with sleep, appetite, memory, or concentration; fatigue or loss of energy; and thoughts of death or suicide.[36]
- Screening and evaluation: The United States Preventive Services Task Force (USPSTF) recommends screening all adults for depression in clinical practices that have systems in place to ensure accurate diagnosis, treatment, and follow-up.[36] Screen with the PHQ-2 or PHQ-9 (**Box 5**[25-33]) and conduct a suicide risk assessment (**Box 8**[44]) as indicated. In addition, the Suicide Prevention Resource Center recommends assessing suicide risk using a standardized tool such as the Columbia Suicide Severity Rating Scale (C-SSRS), a brief, easy-to-use set of questions with a robust evidence base in preventing suicides.[36]
- Management: First-line treatments include antidepressants, psychotherapy, and the combination of both based on patient preference.[36] For patients who select psychotherapy as a treatment option, offer individual or group therapy.[45] Self-help, complementary, and lifestyle modification (eg, exercise, mindfulness practices) should be considered as a supplement or as an alternative if pharmacotherapy and psychotherapy are unavailable, or if the patient declines first-line treatments.[44,45]

Substance use disorders

Alcohol and drug use

Exposure to WTC-related psychological trauma is associated with increased rates of substance use disorders, especially alcohol, the most used substance reported among the 9/11-exposed cohort.[46] Harmful alcohol use increases risk for

BOX 5. ROUTINE MENTAL HEALTH SCREENING AND SUBSTANCE USE SCREENING[25-33]

Condition	Screen	Next Steps	Resources
Depression	Ask (PHQ-2[a]): *Over the last 2 weeks, how often have you been bothered by the following problems?* *1. Little interest or pleasure in doing things* *2. Feeling down, depressed, or hopeless*	For a score ≥3, use the PHQ-9 or another evaluation to diagnose a depressive disorder.	Mental Health and Behavioral Health NYC 988
Generalized anxiety disorder	Ask about • persistent, excessive, uncontrollable worry and anxiety about daily life and routine activities. • myalgia, trembling, jumpiness, headache, dysphagia, gastrointestinal discomfort, diarrhea, sweating, hot flashes, and feeling lightheaded and breathless.	If GAD is suspected, screen with the GAD-7.	Mental Health and Behavioral Health NYC 988
Tobacco use	Ask: • *In the past 12 months, how often have you used tobacco or any other nicotine delivery product (ie, e-cigarette, vaping, or chewing tobacco)?*	If person reports any answer other than "never," continue screening with TAPS Tool (TAPS-2).	Tobacco, Alcohol, Prescription medication, and other Substance use (TAPS) Tool Smoking, Tobacco and E-cigarette Use for Clinicians
Alcohol use	Ask: • *In the past 12 months, how often have you had 5 or more drinks (men)/4 or more drinks (women) containing alcohol in one day?*	If person reports any answer other than "never," continue screening with TAPS Tool (TAPS-2).	Tobacco, Alcohol, Prescription medication, and other Substance use (TAPS) Tool
Drug use	Ask: • *In the past 12 months, how often have you used any prescription medications just for the feeling, more than prescribed, or that were not prescribed for you?*	If person reports any answer other than "never," continue screening with TAPS Tool (TAPS-2).	Tobacco, Alcohol, Prescription medication, and other Substance use (TAPS) Tool

GAD, generalized anxiety disorder; MDMA, 3,4-methylenedioxymethamphetamine; NIDA, National Institute on Drug Abuse; PHQ, Patient Health Questionnaire; TAPS, Tobacco, Alcohol, Prescription medication, and other Substance use.

[a]PHQ-2 screen uses the first 2 questions from the PHQ-9.

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alcohol-related medical conditions and suicide, highlighting the need to screen and identify persons who may benefit from treatment.[46-48]

Screening: Screen all patients for alcohol use disorder and other substance use (**Box 5**[25-33]).

Management: Effective treatment for substance use disorders may include pharmacologic, psychotherapeutic, and psychosocial interventions. Provide brief behavioral counseling interventions to reduce unhealthy alcohol use in adults 18 years and older,[49] such as offering advice for identifying triggers. Address psychosocial stressors and practical barriers to care. Offer medications for addiction treatment (MAT) of alcohol use disorder (ie, intramuscular (IM) or oral naltrexone, acamprosate, or topiramate) and opioid use disorder (ie, IM naltrexone, buprenorphine, or methadone).[46] More complex clinical presentations (eg, withdrawal management) may require specialist consultation or referral to substance use programs. Provide ongoing assessment of symptoms.

Tobacco use

Tobacco use is associated with mental health conditions such as depression, PTSD, and anxiety, which often occur in people exposed to the 9/11 attacks.[3,50] Inequities in smoking rates stem from stress and environmental factors.[51] Offer counseling and nicotine replacement therapy to patients who use tobacco (**Resources**).[50]

Co-occurring PTSD and substance use disorder

Substance use disorders are highly comorbid with PTSD.[46] When these conditions co-occur, treatment outcomes are less successful than the outcomes for patients who have only one of these conditions.[46] Integrated, trauma-based treatment approaches, in which pharmacological, psychotherapeutic, and psychosocial interventions for both conditions are delivered simultaneously, may result in improvements in both substance use and PTSD symptoms,[46,52] although a recent meta-analysis did not find the differences in outcomes in randomized clinical trials evaluating integrated versus nonintegrated trauma-focused treatment to be statistically significant.[53]

SUMMARY

Many people exposed to the 9/11 attacks continue to experience associated health conditions. Be alert to symptoms of 9/11-related illness in patients exposed to the disaster; screen for cancer, substance use, and mental health conditions; and refer those who have, or are suspected of having, a 9/11-related condition to the World Trade Center Health Program for an eligibility assessment.

BOX 6. PRIMARY CARE PTSD SCREEN[39,40]

Have you ever had any experience that was so frightening, horrible, or upsetting that in the past month you:

1. Had nightmares about the event(s) or thought about the event(s) when you did not want to?
2. Tried hard not to think about the event(s) or went out of your way to avoid situations that reminded you of the event(s)?
3. Been constantly on guard, watchful, or easily startled?
4. Felt numb or detached from people, activities, or your surroundings?
5. Felt guilty or unable to stop blaming yourself or others for the event(s) or any problems the event(s) may have caused?

Patients who answer "yes" to 4 of the 5 questions may be suffering from PTSD.

See The Primary Care PTSD Screen for DSM-5 (PC-PTSD-5) for scoring instructions.

PTSD, posttraumatic stress disorder.

BOX 7. GAD-7 GENERALIZED ANXIETY DISORDER SCREEN[30]

Over the last 2 weeks, how often have you been bothered by the following problems?

	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious, or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it is hard to sit still	0	1	2	3
5. Being so restless that it is hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid as if something awful might happen	0	1	2	3
Total score = Add Columns	____+	____+	____+	___

Add all scores checked by patient: 5-9, mild anxiety; 10-14, moderate anxiety; 15 and above, severe anxiety.

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BOX 8. SUICIDE RISK ASSESSMENT AND INTERVENTION[44]

If a patient responds positively to item 9 on the PHQ-9[a] or you suspect the patient has suicidal thoughts, screen for suicide risk.

Questions	Answers	Risk Level	Actions based on positive responses (respond based on highest level of risk)
1. Have you wished you were dead or wished you could go to sleep and not wake up? 2. Have you had any thoughts of killing yourself?	Yes to 1 and no to 2	Low	• Consider referral to mental health or behavioral health provider. • Consider patient education (**Resources**). • Ask question 6 (response may increase risk category).
If No to 1 and Yes to 2 or Yes to both, ask 3-6.			
3. Have you been thinking about how you might want to kill yourself?	Yes	Moderate	• Assess risk factors and facilitate evaluation for inpatient admission, or complete safety plan with follow-up within 24-48 hours. • Educate patient.
4. Have you had these thoughts and had some intention of acting on them? 5. Have you started to work out or worked out the details of how to kill yourself? Do you intend to carry out this plan?	Yes to 4 and/or 5	High	• Facilitate immediate evaluation by psychiatrist or psychiatric nurse practitioner. • Educate patient.
6. Have you ever done anything, started to do anything, or prepared to do anything to end your life?	If yes in the past 4 weeks	High	• Facilitate immediate evaluation for inpatient care. • Educate patient.
	If yes 1-12 months ago	Moderate	• Assess risk factors and refer to mental health or behavioral health provider. • Educate patient, emphasizing importance of reporting suicidal thinking.

See also the Columbia Suicide Severity Rating Scale (C-SSRS).

[a]Item 9 on the PHQ-9 reads, "Thoughts that you would be better off dead or of hurting yourself in some way." A positive response to this question would be any response other than "not at all" with respect to experiencing this symptom in the past 2 weeks.

RESOURCES FOR PROVIDERS

Asthma

- Global Initiative for Asthma (GINA). Global Strategy for Asthma Management and Prevention, 2024: https://ginasthma.org/wp-content/uploads/2024/05/GINA-2024-Strategy-Report-24_05_22_WMS.pdf

Cancer

- New York City Department of Health and Mental Hygiene (NYC Health Department). Colorectal Cancer Screening Recommendations: https://www.nyc.gov/assets/doh/downloads/pdf/cancer/colon-cancer-screening-recommendations.pdf
- United States Preventive Services Task Force. Recommendation topics: https://uspreventiveservicestaskforce.org/uspstf/recommendation-topics

Chronic obstructive lung disease

- Global Initiative for Chronic Obstructive Lung Disease (GOLD): www.goldcopd.org

Mental health

- NYC Health Department. Mental Health and Behavioral Health: https://www.nyc.gov/site/doh/providers/health-topics/mental-and-behavioral-health.page
- NYC Health Department. Depression Action Kit: https://www.nyc.gov/site/doh/providers/resources/public-health-action-kits-depression.page
- National Institute on Drug Abuse Clinical Trials Network. Patient Health Questionnaire-2 (PHQ-2): https://cde.nida.nih.gov/sites/nida_cde/files/PatientHealthQuestionnaire-2_v1.0_2014Jul2.pdf
- PHQ-9: https://www.phqscreeners.com
- Generalized Anxiety Disorder (GAD)-7: https://www.phqscreeners.com
- Primary Care Posttraumatic Stress Disorder (PTSD) Screen for *DSM-5* (PC-PTSD-5): https://www.ptsd.va.gov/professional/assessment/documents/pc-ptsd5-screen.pdf
- The Columbia Lighthouse Project. Columbia Suicide Severity Rating Scale (C-SSRS): https://cssrs.columbia.edu/wp-content/uploads/Community-Card-Patients-3.pdf
- National Institute on Drug Abuse. Tobacco, Alcohol, Prescription medication, and other Substance use (TAPS): https://nida.nih.gov/taps2

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RESOURCES FOR PROVIDERS *(continued)*

Obstructive sleep apnea

- STOP-Bang: http://www.stopbang.ca/osa/screening.php
- Berlin Questionnaire: https://www.ncbi.nlm.nih.gov/books/NBK424168/bin/appb-fm1.pdf

Smoking cessation

- NYC Health Department. Information on Smoking, Tobacco, and E-cigarette Use for Clinicians: https://www.nyc.gov/site/doh/providers/health-topics/smoking-and-tobacco-use.page

Substance use

- NYC Health Department. Alcohol and Drug Use: https://www.nyc.gov/site/doh/health/health-topics/alcohol-and-drug-use.page

Trauma-informed care

- Center for Health Care Strategies. Key Ingredients for Successful Trauma-Informed Care Implementation: https://www.samhsa.gov/sites/default/files/programs_campaigns/childrens_mental_health/atc-whitepaper-040616.pdf

World Trade Center Health Program

- Centers for Disease Control and Prevention (CDC), National Institute for Occupational Safety and Health (CDC/NIOSH). 9/11 World Trade Center Health Program Information for Providers: https://www.cdc.gov/wtc/providers.html
- CDC/NIOSH. 9/11 World Trade Center Health Program Covered Conditions: https://www.cdc.gov/wtc/conditions.html
- 9/11 Health Information for Health Care Providers: https://www.cdc.gov/wtc/pdfs/factsheets/WTCHP_HealthInfo_HealthCareProviders-508.pdf
- CDC/NIOSH. 9/11 World Trade Center Health Program. Time Intervals for New-Onset Aerodigestive Disorders: https://www.cdc.gov/wtc/pdfs/policies/WTCHP_PP_Time_Intervals_New_Onset_AeroDig_Disorders_30_August_2017-508.pdf

RESOURCES FOR PATIENTS

Mental health and substance use

- 988 Suicide and Crisis Lifeline (24/7):
  - Call 988
  - https://nyc988.cityofnewyork.us/en

  A 24/7 call, text, and chat line for people seeking crisis counseling. Services include suicide prevention; substance use services; peer support; short-term counseling; assistance scheduling appointments or accessing other mental health services; and follow-ups to ensure connection to care. Interpreters available in more than 200 languages.
- NYC Health Department. Suicide Prevention: https://www.nyc.gov/site/doh/health/health-topics/suicide-prevention.page

World Trade Center Health Program

- Centers for Disease Control and Prevention (CDC), National Institute for Occupational Safety and Health (CDC/NIOSH). 9/11 World Trade Center Health Program: https://www.cdc.gov/wtc
- CDC/NIOSH. 9/11 World Trade Center Health Program Outreach Materials: https://www.cdc.gov/wtc/print-materials.html

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