

# **SUMMER 2023 DOCUMENT UPDATE**

#### Purpose

Tobacco dependence treatments are as effective or more effective than the treatment of most other medical conditions. Effective treatment includes but is not limited to physicians. Most tobacco users do not receive the recommended (20 minutes) treatment. Even minimal interventions (3 minutes or less) increase long term abstinence, although they are much less effective. This guideline provides physicians and other clinicians with the evidence-based tools necessary to systematically provide these effective treatments in outpatient setting and is limited to age 18 and over unless otherwise indicated.

#### Key Messages (and Strength of Evidence):

- Physician advice to quit smoking increases long-term abstinence rates. (A)
- There is a strong dose response relationship between the minutes of contact, number of contacts, (face to face or phone calls from physicians, other clinicians, or counselors) and long-term cessation. (A)
- The combination of both medication and counseling is more effective than either one offered alone (A); counseling should include the need to reduce exposure to second-hand smoke, which is causally linked with asthma, cardiovascular disease, diabetes, rheumatoid arthritis, Oral cancers, gum disease, stroke and cancer (e.g., lung and leukemia) and emphysema (Level 1).

#### **Key Recommendations**

- Use 5 A's of counseling patients to stop using tobacco (See Intensity of Interventions on page 2) OR Use 3 easy steps 2 A's and 1 R (Ask, Advise, Refer):
  - 1. Ask and document the status of tobacco use (smoking, rules about smoking in the house and the car and use of Emerging and Alternative Products e.g., E-Cigarettes, Hookahs, Chewing tobacco) of each patient.
  - 2. Advise and Assess: Advise all smokers to quit. Encourage all families with smokers to maintain a 100% smoke-free home and car. Prescribe/recommend medication to all tobacco users willing to quit, except when contraindicated. If smoker is unwilling to quit discuss 5 "R's": Relevance, Risk, Rewards, Roadblocks and Repeat at each visit.
  - 3. Refer patients to treatments that include practical assistance with problem solving/skills training and support or to intensive treatment programs (at least 90 minutes in total time) such as listed below and on pages 5 and 6 and arrange follow-up.
- The FDA has permitted the removal of the black box warnings for Chantix (varenicline) and Zyban (bupropion), citing that risk of serious side effects on mood, behavior, thinking is no greater than experienced on placebo.
   The process of tobacco cessation, using ANY pharmacotherapy option (including nicotine replacement), can result in psychiatric nicotine withdrawal symptoms such as mood changes, insomnia, irritability, and anxiety.
   Regular monitoring and assessment for new or changing symptoms continues to be highly recommended.

When addressing youth nicotine dependence

- current recommendations include cessation therapy, counseling, and off-label nicotine replacement therapy for adolescents (ages 12-18).
- While there are no FDA recommendations for pharmaceutical interventions, preliminary evidence shows no increase in adverse effect risk for nicotine replacement therapy (patch, gum, etc.).
- Few studies address bupropion and varenicline as pharmaceutical adjuncts to cessation therapy in adolescents (ages 12-18). For bupropion, there is some evidence of short-term efficacy when it is combined with counseling; however, there was rapid relapse when bupropion was discontinued.
- Varenicline (Chantix) has not been shown to increase tobacco abstinence rates in total, however, it was
  associated with a slightly faster achievement in abstinence and improved post treatment abstinence
  outcomes.



- Assess patient risk and exposure to secondhand smoke and recommend avoiding exposure. Offer treatment to the smoker who is in their environment.
- Smokeless Tobacco products such as spitting tobacco, dip, chew, snuff, and snus are addictive, harmful to health, and not a safe alternative to smoking.
  - There is a higher prevalence of use among rural youth and males.
  - Increased risk of heart disease, arterial disease, stroke, in mouth, pharynx, larynx, esophageal, stomach, and pancreatic cancers, as well as oral damage including precancerous oral lesions, gum disease, tooth decay, and tooth loss.
- Dangers of Waterpipe tobacco (Hookahs) are greatly underestimated by patients.
  - Compared to cigarettes, these have higher concentrations of particulate matter, carbon monoxide, volatile organic chemicals, polycyclic aromatic hydrocarbons, acrolein, heavy metals, and arsenic.
  - Long-term waterpipe use worsens atherosclerotic disease, myocardial ischemia and infarction rates as
    well as is linked to higher mortality rates in hospitalized patients even when compared to long-term
    cigarette smokers.
- Advise that electronic cigarette (e-cigarette) and vaping products are not fully regulated by the US Food and Drug Administration. A *National Academy of Sciences* report found 1) e-cigarettes contain toxic substances;
   chemicals present in e-cigarette aerosols are cancer causing; and 3) there is evidence that e- cigarettes are insufficient as a cessation aid. Vaping may instead have a detrimental effect on tobacco cessation attempts including an increase in prevalence in traditional cigarette use and of dual use.
- E-cigarette use among U.S. youth and young adults is now a major public health concern, growing at an alarming rate among high school students from 2011 to 2020. They are the most used form of tobacco among youth in the United States, surpassing conventional tobacco products.
  - Advise against initiating use of these products by youths, young adults, women who are pregnant, and people who do not currently use tobacco products.
  - E-cigarettes, a continually changing and heterogeneous group of products, are used in a variety of ways.
  - Most e-cigarettes contain nicotine, which can cause addiction and can harm the developing adolescent brain including the limbic system worsening anxiety, irritability, and impulsivity
  - The CDC and the American Thoracic Society have raised concerns that there is increasing evidence that inhaling the aerosol from e-cigarettes "damages lung tissue and lowers the body's natural resistance to infections and to cancers".
  - There is a risk of nicotine toxicity from skin exposure to e-liquids and a risk of traumatic injury or burns secondary to E-cigarette battery explosions.
  - Most recently, primarily due to the concern for e-cigarette, or vaping, product use-associated lung injury (EVALI), the CDC, FDA, and state health authorities recommend that people not use THC-containing products, particularly from informal sources like friends, family, or in-person or online dealers.
- Novel Corona Virus (COVID-19, SARS-CoV-2) is consistently being shown to double disease progression and death in tobacco users. Adolescents and young adults (age 13-24) are five times more likely to test positive for COVID-19 if they vape, and seven times more likely if they are dual users of vape and cigarettes.



# Intensity of Interventions and Content of Communication

INTENSITY OF INTERVENTIONS	< 3 minutes	;	<20 minutes	30-300 minutes, 2-8 visits	
CONTENT OF COMMUNICATION	Ask about tobacco use Advise/encourage quitting in a clear, strong, personalized manner Assess willingness to quit  Yes No		Ask Advise Assess Assist w/a quit plan Recommend medication except where	Ask Advise Assess Assist Medication Problem solving Skills building	
	Recommend medication except where contraindicated  Refer for treatment - NYS Quitline - Healthy Living Center  Offer educational materials - NYS Quitline materials - National Cancer Institute-Clearing the Air - AHRQ-AHRQ - You Can Quit Smoking - Smokefree.gov - URMC Smoking Research	Motivate using 5 "R's"  Relevance Risk Rewards Roadblocks Repeat	STAR Set date Tell others Anticipate challenges Remove tobacco products  Arrange for follow up to assess pharmacotherapy & progress	Skills building Arrange  Through referral to intensive treatment or in office  May use variety of clinician types and formats (e.g., face to face, phone calls, group counseling)  Referral to The Center for Community Health and Prevention (CCHP), Clinical Services.	



FOR SMOKERS NOT READY TO QUIT 5 "R's"							
Elicit Patients' Perspectives On:							
Relevance Of quitting	Ask patients why quitting may be personally relevant to them Discuss link to current & future health status/concerns, family/loved ones						
Risks Of continued smoking	Ask patients to identify relevant negative consequences of tobacco use  • Shortness of breath, harm to pregnancy, impotence, infertility  • Heart attacks/strokes, lung and other cancers, COPD, disability  • Increased risks of lung cancer & heart disease in family, higher rates of smoking by their children, increased risk for low birth weight, asthma, middle ear & respiratory infections in children of smokers						
Rewards Of quitting	Ask patients to identify potential benefit • improved health • saving money • reducing wrinkling/aging of skin • protecting your children  of stopping tobacco use • food tasting better • feeling better physically • home, car, clothes, and breath smelling better						
Roadblocks To quitting	Ask patients to identify barriers to quitting and target treatment to address barriers  • withdrawal symptoms fear of failure  • weight gain lack of support  • depression enjoyment of smoking  • stress relief  • cost of treatment						
Repeat At every visit	Continue to use 5 "R's" at every visit. Tell tobacco users who have failed previous quit attempts that most people make repeat attempts before being successful						

### **Prescribing Medications for Tobacco Dependency\***



Pharmacotherapy & Availability	Precautions & Contraindications	Side Effects	Dosage/Use	Duration of treatment	Comments
OTC & Rx Generic Nicotine Nicotrol Brand, Nicoderm CQ	<ul> <li>For sleep disruptions, can be removed before bed and reapplied in AM. See note under dosage</li> <li>Do not apply to broken skin</li> <li>Patients should stop smoking upon initiation</li> </ul>	<ul><li>Local skin reaction</li><li>Insomnia</li><li>Vivid dreams</li></ul>	<ul> <li>21 mg/24 hours</li> <li>14 mg/24 hours</li> <li>7 mg/24 hours</li> <li>If removed at bedtime, reapply in AM. Use additional immediate release nicotine products in the am until patch blood levels increase, may take a few hours</li> </ul>	<ul> <li>4 weeks with first dose, then reductions in the dose every two weeks.</li> <li>Up to 6 months</li> </ul>	<ul> <li>American Thoracic Society recommends considering avoidance in psychiatric patients. Varenicline may be a better choice (Leone et al., 2020).</li> </ul>
Nicotine Gum  OTC only Generic Brand Nicorette	Avoid eating and drinking anything but water in the 15 minutes before or during chewing.	<ul><li>Mouth soreness</li><li>Dyspepsia</li></ul>	<ul> <li>If you smoke your first cigarette within 30 minutes of waking up, use 4 mg nicotine gum. If you smoke your first cigarette more than 30 minutes after waking up, use 2 mg nicotine gum according to the following 12-week schedule:</li> <li>Weeks 1 to 6: 1 piece every 1 to 2 hours</li> <li>Weeks 7 to 9: 1 piece every 2 to 4 hours Weeks 10 to 12: 1 piece every 4 to 8 hours</li> <li>Chew slowly until it tingles or minty taste then park between cheek &amp; gum</li> <li>Chew and park intermittently for 30 min</li> </ul>	Up to 12 weeks, may be used for longer period after reassessment	<ul> <li>To improve your chances of quitting, use at least 9 pieces per day for the first 6 weeks.</li> <li>If you experience strong or frequent cravings, you may use a second piece within the hour. However, do not continuously use one piece after another since this may cause you hiccups, heartburn, nausea or other side effects</li> <li>Do not use more than 24 pieces a day</li> </ul>
Nicotine Nasal Spray  Rx only Brand: Nicotrol® NS Ea. 10ml container holds 100mg off nicotine	<ul> <li>Not for patients w/asthma, nasal, or sinus disorders</li> </ul>	Nasal irritation	<ul> <li>One dose = 0.5 mg = 1 spray to each nostril with head tilted back (1 mg total). Do NOT sniff, swallow or inhale</li> <li>Initially 1-2 doses per hour, increase as needed. to MDD of 80 sprays or 40 mg (10 doses/hour) per day</li> <li>Should gradually reduce dosage and discontinue weeks 9-14</li> <li>Regular use of the spray during the first week of treatment may help patients adapt to the irritant effects of the spray</li> </ul>	• 3-6 months	<ul> <li>Peak nicotine levels ~10 min.</li> <li>Dosage can then be adjusted in those subjects with signs or symptoms of nicotine withdrawal or excess</li> <li>Patients who are successfully abstinent on NICOTROL NS (nicotine nasal spray) should be treated at the selected dosage for up to 8 weeks, following which use of the spray should be discontinued over the next 4 to 6 weeks</li> </ul>
Nicotine Inhaler^  Rx only Brand:  Nicotrol® Inhaler ^currently unavailable (indefinite suspension of production)	Avoid eating or drinking anything but water in the 15 minutes before or during use. Nicotine delivery declines in temps below 40 degrees F	<ul> <li>Local irritation of mouth and throat</li> <li>Bronchospasm</li> </ul>	<ul> <li>Initial: 6 to 16 cartridges/day (at least 6 cartridges/day for the first 3 to 6 weeks) for up to 12 weeks; maximum: 16 cartridges/day</li> <li>Note: Best effect achieved with frequent puffing into back of throat, not lungs (20 minutes).</li> <li>Use beyond 6 months is not recommended (has not been studied)</li> </ul>	• Up to 6 months	<ul> <li>If patient is unable to stop smoking by the fourth week of therapy, consider discontinuation.</li> <li>Nicotine is deposited in the oropharynx and is absorbed there.</li> </ul>

Guidelines are intended to be flexible. They serve as reference points or recommendations, not rigid criteria. Guidelines should be followed in most cases, but there is an understanding that, depending on the patient, the setting, the circumstances, or other factors, care can and should be tailored to fit individual needs.

Pharmacotherapy & Availability	Precautions & Contraindications	Side Effects	Dosage/Use	Duration of treatment	Comments
			<ul> <li>Discontinuation of therapy: gradually reduce daily dose over 6 to 12 weeks</li> <li>Some patients may not need gradual dose reduction and may stop treatment abruptly</li> </ul>		
Nicotine Lozenges  OTC only	<ul> <li>Do not eat or drink anything but water in the 15 minutes before or during use</li> <li>1 lozenge at a time Limit 20 in 24 hours</li> </ul>	<ul> <li>Local irritation of throat</li> <li>Hiccups</li> <li>Heartburn</li> <li>Indigestion</li> <li>Nausea</li> </ul>	<ul> <li>If smoke/chew &gt; 30 min. after waking: 2 mg (up to 20 pcs/day)</li> <li>If smoke/chew &lt; 30 min. after waking 4 mg (up to 20 pcs/day)</li> <li>Dissolve slowly between check and gum</li> <li>Wk 1-6: 1 lozenge every 1-2 hrs</li> <li>Wk 7-9: 1 lozenge every 2-4 hrs</li> <li>Wk 10-12: 1 lozenge every 4-8 hrs</li> </ul>	• 12 weeks, may be used for longer period after reassessment	
Bupropion SR Tablets  Rx only Generic bupropion SR and brand Zyban® SR 150mg tab	<ul> <li>Suicidality warning, particularly in children, adolescents, and young adults.</li> <li>Neuropsychiatric disorders (black box warning removed)</li> <li>Contraindicated with history of seizures</li> <li>History of eating disorders</li> <li>Use of MAO inhibitors in past 14 days</li> </ul>	<ul> <li>Insomnia</li> <li>Dizziness</li> <li>Diaphoresis</li> <li>Headache</li> <li>Tremor</li> <li>Tachycardia</li> <li>Hypertension</li> <li>Dry mouth</li> </ul>	<ul> <li>150 mg every morning for 3 days then 150 mg twice daily</li> <li>Begin treatment 1-2 weeks, requires 5-7 days to reach steady state</li> </ul>	• 7-12 weeks maintenance up to 6 months	To discontinue, gradually taper dose over 2-4 weeks
Varenicline Tablets  • Rx only • Generic	<ul> <li>Neuropsychiatric disorders, (although the black box warning has been removed). May be worse combined with alcohol. Observe patient and discontinue if symptoms appear</li> <li>Rare seizures within the 1st month of therapy</li> <li>Rare increase in intoxicating effects of alcohol</li> <li>Rare somnambulism</li> </ul>	<ul> <li>Nausea</li> <li>Dizziness, somnolence, difficulty concentrating,</li> <li>Insomnia</li> <li>Very rare skin reactions, angioedema</li> </ul>	<ul> <li>0.5 mg once daily for days 1-3, then 0.5mg twice daily for days 4-7, then 1 mg twice daily. Quit smoking between 8-35 days of starting treatment</li> <li>Consider a gradual approach to quitting for patients who are sure that they are not able or willing to quit abruptly. After starting treatment, reduce smoking by 50% from baseline within the first 4 weeks, by another 50% in the next 4 weeks, and continue reducing with the goal of reaching complete abstinence by 12 weeks. Continue treatment for an additional 12 weeks, for a total of 24 weeks</li> <li>Requires dose adjustment for severe CKD/ESKD</li> </ul>	• Up to 12 weeks, then reassess. May use an additional 12 weeks	<ul> <li>Avoid operating machinery until it is known how varenicline will affect the patient (Varenicline (Chantix®), Package Insert 2021).</li> </ul>

<sup>\*</sup>The FDA has permitted the removal of the black box warnings for Chantix (varenicline) and Zyban (bupropion), citing that risk of serious side effects on mood, behavior, or thinking is lower than previously suspected. Nevertheless, the process of tobacco cessation, using ANY pharmacotherapy option (including nicotine replacement) can result in psychiatric nicotine withdrawal symptoms such as mood changes, insomnia, irritability, and anxiety. Regular monitoring and assessment for new or changing symptoms continues to be highly recommended. DISCUSS THE IMPORTANCE OF PATIENTS TAKING

MEDICATION AS PRESCRIBED AS SOME MAY TAKE A LOWER DOSAGE FOR COST SAVINGS. The information contained within this table is not comprehensive. Please see medication package inserts for additional information.

	Patch	Gum	Lozenge	Inhaler	Spray	Varenicline	Bupropion SR
Patch		+	+	+	+	*	NB
Gum	+		+	+	+	*	NB
Lozenge	+	+		+	+	*	NB
Inhaler^ ^currently unavailable (indefinite suspension of production)	+	+	+		+	*	NB
Spray	+	+	+	+		*	NB
Varenicline	*	*	*	*	*		NB
Bupropion SR	NB	NB	NB	NB	NB	NB	

<sup>· -</sup> Increased Benefit

**B** - No Benefit

ombination therapy (the use of prescription and/or over the counter cessation options together) is acceptable and, in some situations, creates an additional benefit for idividuals. Examples of combination therapies that can provide an increased benefit over the use of a singular therapy include: patch and gum, patch and lozenge, patch nd inhaler (Rx), patch and spray (Rx), lozenge and gum, lozenge and inhaler (Rx), gum and inhaler (Rx), and gum and spray (Rx). Additionally, the ombination of any of the patch, gum, lozenge, inhaler, or spray with Varenicline can provide a small additional benefit. The combination of any cessation aid with upropion SR provides no additional benefit, and is not recommended.

<sup>-</sup> Small Benefit



#### **Resources for Patients**

### <u>The New York State Smokers' Quitline</u> 1-866-NY-QUITS (1-866-697-8487) www.nysmokefree.com/

Deaf, Hard of Hearing and Speech Disabled: Call NY Relay Service at 711 (Voice or TTY), Give Operator Quitline Number Call to find out if you are eligible for free starter kit of Nicotine Replacement Therapy to help you stop smoking

#### Livingston

<u>Community Outreach Services at Noyes Memorial Hospital</u>

111 Clara Barton St. Dansville, NY 14437 Phone: (585) 335-4327

Alternate Phone: (585) 335-4355

Refers to Monroe County resources (Below)

#### Monroe

Center for Community Health and Prevention

Phone: (585) 602-0720

Email: <a href="mailto:healthy\_living@urmc.rochester.edu">healthy\_living@urmc.rochester.edu</a>
Individual Counseling Sessions for Adults, tailored to the individual's needs.

Commit to Quit! Group Program: A FREE group program for adults who would like to quit, led by an expert team of certified tobacco counselors at The Center for Healthy Living, at URMC, is designed to help you find your path towards freedom from smoking, vaping or chewing tobacco.

Website: <a href="https://tinyurl.com/a77pchtn">https://tinyurl.com/a77pchtn</a>
Vape Escape Online Teen Group Program:
FREE Zoom program for Teens 12-18 who would like to quit vaping. Offered over Zoom, Vape Escape is a series of group sessions which provides teens ages 12 to 18 with an interactive and supportive environment where they can talk openly about vaping with our Center doctors and health behavior change experts, as well as other youth with similar goals.

Website: <a href="https://tinyurl.com/28uwwmav">https://tinyurl.com/28uwwmav</a>

#### Wilmot Cancer Inst. Tobacco Cessation Program

Provides text messaging support to quit smoking and nicotine patches, gum, and/or lozenges at no cost. Fully remote. Available in English and Spanish.

Text/call: 585-504-9461

Email: quitcenter@urmc.rochester.edu Website: https://tinyurl.com/8kyvpw9i

#### **Ontario**

The Springs Clifton Springs Hospital & Clinic 2 Coulter Road Clifton Springs, NY 14432 (315) 462-0390

The Springs: Clinic at Clifton Springs Hospital

#### Steuben

Quit-Stay-Quit Steuben Co Public Health Southern TTAC Steuben Co Public Health 3 East Pulteney Square Bath, NY 14810 (607) 664-2438

Provides group cessation classes.

#### Wayne

Wayne County Health Tobacco
Cessation Program
Wayne County Public Health
1519 Nye Road Suite 200
Lyons, NY 14489
(315) 946-5749

Website: https://www.wcphny.com

Cessation courses and individual sessions are taught by the Health Education Program at Wayne County Public Health. Individual counseling 1 hr. sessions. Neighboring county residents are welcome. NRT is available, starting with 2 wks. up to 6 months. PATCH, GUM AND LOZENGES.

#### **Yates**

Tobacco Cessation Programs
Yates County Public Health
417 Liberty St., Suite 2120
Penn Yan, NY 14527
(315) 536-5160

Provides group cessation classes. \$10 registration fee, refundable upon completion of program. Group of 2 or more needed for coaching. 4 neighboring counties: Ontario, Seneca, Steuben, Schuyler. No NRT available (coaching only). PT will have to get doctor or clinical approval. Call for dates, times, and fees. Email Kathy Swarthout at kswarthout@yatescounty.org

### **High-Risk Populations**

#### Perinatal:

- As recommended by the American College of Obstetricians and Gynecologists, pregnant women who use tobacco products should be offered individualized care that may include psychosocial, behavioral, and pharmacotherapy interventions. (ACOG, 2020)
- Current CDC Data for NYS (2020) show 3.7% of mothers reported smoking cigarettes during pregnancy, down from 4.8% in 2016.
- Risks of tobacco use specific to the perinatal population include: Ectopic pregnancy, decreased fertility, placenta
  previa, placental abruption, preterm labor and preterm, pre-labor rupture of membranes, increased perinatal
  mortality and stillbirth, fetal growth restriction, low birth weight, congenital birth defects, orofacial clefts,
  decreased maternal thyroid function, changes in micronutrient levels such as decreased folate and vit B12.
- Second hand exposure carries a 20% increased risk of premature delivery.
- Clinical evidence supports psychosocial and behavioral counseling, which increase rates of smoking cessation.
- o Introduce NRT as early as is needed in pregnancy.
- Use the lowest dose that controls withdrawal symptoms and permits abstinence.
- Relative to smoking, blood nicotine levels are lower or equivalent when using NRT.
- Short acting NRT products (e.g., gum, lozenge or inhaler) that allow intermittent dosing are preferred.
- The specific effects of nicotine replacement therapy on fetal development are unknown.
- Nicotine passes into the placenta and is readily transferred to the fetus.
- Encourage patients who are pregnant to attempt cessation using counseling and behavioral interventions prior to using pharmacological approaches.

**Lung Cancer:** Tobacco is the leading cause of cancer deaths in Monroe County, the death rate is higher among males (56.1/100,000) compared to females (37.9/100,000).

- o Incidence and death rates for lung cancer are higher among Black males (111.5/100,000) and females (61.7/100,000) compared to White males (69.4/100,000) and females (56.4/100,000).
- Mortality: Black males (85.8/100,000), Black females (44.3/100,000), White males (53.2/100,000), White females (36.9/100,000).

<u>Socio-Economic Status</u>: Those less educated and those who make less money are more likely to smoke on a daily basis.

#### **Adolescents and Youth:**

- Tobacco use at any age and in any form is not safe, but it is particularly dangerous for youth and young adults.
- Bupropion has a boxed warning regarding suicidal thoughts in children, adolescents and young adults taking antidepressants.
- Given the effectiveness of pharmacotherapy for adults and the severe harms of tobacco use disorder, the American Academy of Pediatrics recommends that providers consider off-label pharmacotherapy for youth who are moderately or severely addicted.
- Data show sustained declines in youth tobacco use across all tobacco product category types.
- Youth cigarette smoking rate reached an all-time low of 2.1%.
- Use of e-cigarettes, also known as vaping or Electronic Nicotine Delivery Systems (ENDS), declined from 22.5% (2020) to 18.7% (2022).
- Overall tobacco use among adolescents and youth declined across all product categories from 25.6% in 2020 to 20.8% in 2022.

#### **Mental Health & Addiction Treatment Populations:**

- Between 65-87% of patients in addiction treatment smoke tobacco, compared to about 21% of the general population. These high rates of tobacco use contribute to significant patient suffering and early death. Over 53% of people with substance use disorder (SUD) die of tobacco-related causes.
- o Those with mental illness and substance use disorder consume almost 40% of all cigarettes smoked by adults.
- Despite popular opinion, persons with mental illness and/or substance use disorders want to quit smoking, want information on cessation services and resources, and most importantly they can successfully quit using tobacco. (Sullivan, 2002)
- Treating tobacco use during addictions treatment increases likelihood of abstinence from alcohol and illicit drugs by 25%.
- Individuals with a behavioral health condition are far more likely to die of smoking-related diseases than from causes related to their mental illness or substance use disorder.
- Smoking cessation is associated with reduced depression, anxiety, and stress and improved positive mood and quality of life compared with individuals who continue to smoke. The effect sizes are equal or larger than those of antidepressant treatment for mood and anxiety disorders.

#### **Tobacco Use and Oral Health:**

- Cigarettes, smokeless tobacco, and other forms of tobacco cause oral cancer, gum disease, dental caries, oral mucosal lesions and other oral health problems.
- Untreated tooth decay is higher in people who smoke cigarettes. Over 40% of adults aged 20 to 64 who currently smoke cigarettes have untreated tooth decay. Adults aged 65 or older who smoke cigarettes are twice as likely to have untreated tooth decay as those who never smoked.
- o About 43% of adults aged 65 or older who currently smoke cigarettes have lost all of their teeth.
- Use of tobacco, including smokeless tobacco and alcohol is associated with increased risks of oral cancer and can cause white or gray patches inside the mouth (e.g., oral leukoplakia).
- o E-cigarette use is associated with several oral health concerns including, xerostomia, oral candidiasis, oral mucosal lesions, halitosis, dental caries, and gum disease.

## **Resources for Physicians**

Tobacco use is the single most preventable cause of disease, disability, and death in the United States and a risk factor for 6 of the world's 8 leading causes of death. Each year, smoking kills 480,000 Americans – causing about one out of every five deaths in the U.S. If more progress is not made, 5.6 million children under age 18 alive today will die prematurely from smoking-caused disease. Over 42 million adults (18%) of the US population still smoke and 70% of tobacco users want to quit. Users say expert advice is important to their decision to quit. The expert can be a physician, dentist, clinician, or other health care worker in your practice. Physician-assisted (counseling and medication) quit rates at one year are 10-40% and these rates increase with more contact time with the patient.

<u>Electronic Health Record Referral</u>: If not already in place, health systems are encouraged to develop easy to use, proactive referral mechanisms to local, regional, and state-wide cessation programs. Minimally, this should include the NYS Smokers' Quitline.

#### Statistics, Medication Concerns, Cross-tolerance, Self-medication:

- 75% of smokers have a past or present problem with mental illness and substance abuse.
- Up to 75% of individuals with serious mental illnesses and/or substance use disorders smoke.
- o 30–35% of treatment staff smoke.

#### Monroe County Medical Society Community-wide Guidelines: Treating Tobacco Use and Dependence

- Nicotine affects medication absorption.
  - Tobacco smoke interactions with psychiatric medications:
    - Clinically significant interactions result from the combustion products of tobacco smoke.
    - Tobacco smoke is a potent inducer of 1A2 and 2E1 P450 isoenzymes.
    - Constituents in tobacco smoke (polycyclic aromatic hydrocarbons) enhance the metabolism of other drugs, resulting in a reduced pharmacologic response. (Fiore, 2008)
    - Tobacco use can result in a 40% reduced serum level of some medications.
    - Abstinent Tobacco users can experience side effects from supra-therapeutic drug levels of medications such as:
      - Clozapine, Amitriptyline, Olanzapine, Nortriptyline, Fluvoxamine, Imipramine, Theophylline, Haloperidol, Clomipramine and Caffeine.
    - Caffeine is 99% metabolized by CYP1A2. Clearance is increased by 56% in smokers. Median caffeine concentrations are 2-3x higher in non-smokers. When a patient quits smoking, their caffeine intake should be reduced by ½ to avoid excessive caffeine levels. Symptoms of caffeine toxicity can mimic those of nicotine withdrawal. (Zevin & Benowitz, 1999)

#### **Measures Commonly Used by National Organizations:**

- Screening and Cessation: Percentage of patients aged 18 years and older who were screened for tobacco use one or more times within 24 months AND who received cessation counseling intervention if identified as a tobacco user. (MIPS)
- Smoking and Cessation: Percentage of patients aged 18 years and older who were current smokers or tobacco users, who were seen by a practitioner during the measurement year and who received advice to quit smoking or tobacco use of whose practitioner recommended or discussed smoking or tobacco use cessation medications, methods or strategies. (MIPS)

#### See Also: SAMHSA Medication Chart- Appendix A, page 36:

https://smokingcessationleadership.ucsf.edu/sites/smokingcessationleadership.ucsf.edu/files/Downloads/Toolkit s/CTFR Toolkit FINAL May262022.pdf.

#### Agency for Healthcare Research and Quality

- o Provides up-to-date information about treating tobacco use and dependence.
- https://www.ahrq.gov/professionals/clinicians-providers/guidelinesrecommendations/tobacco/index.html.

#### American Academy of Pediatrics (AAP) Julius B. Richmond Center of Excellence

 Provides current information on coding and payment, training and CME courses, practice guidelines, and resources for counseling parents about smoking cessation and prevention of children's exposure to tobacco smoke.

#### **American Thoracic Society**

- o Provides education on vaping/electronic nicotine delivery systems.
- https://www.thoracic.org/patients/patient-resources/resources/vaping-electronic-nicotine-deliverysystems.pdf

#### **Centers for Disease Control and Prevention**

- Provides information e-cigarettes, e-cigarette composition, effects on health, and risk vs benefits.
- https://www.cdc.gov/tobacco/basic information/e-cigarettes/about-e-cigarettes.html

#### Monroe County Medical Society Community-wide Guidelines: Treating Tobacco



#### Center for a Tobacco-Free Finger Lakes (CTFFL) - based at the University of Rochester Medical Center

- Provides free "Tobacco Dependence Treatment: Train-the-Trainer" presentations for staff who work at medical health systems and mental health systems in 11 counties in the Finger Lakes Region of Western NY, including: Cayuga, Chemung, Livingston, Monroe, Ontario, Schuyler, Seneca, Steuben, Tompkins, Wayne and Yates counties.
- o CTFFL also provides evidence-based resources, programs, and consultations to assist providers in the design and implementation of office-based systems that identify and effectively treat tobacco dependence. Call:
- (585) 276-7223 or via e-mail: <u>TreatNicotine@urmc.rochester.edu</u>
- Medical and behavioral health clinicians in the above 11 counties can go to
   <a href="http://www.smokingresearch.urmc.edu">http://www.smokingresearch.urmc.edu</a> to schedule a free train-the-trainer session. Any clinicians in New
   York State can go to this website to download free clinical training modules and educational materials for both clinicians and patients.

#### Cigarette Smoking, New York State Adults, 2016

- provides smoking rates among NYS adults, as well as a comparison of smoking rates between 2011 and 2016 by demographic indicators:
- https://www.health.ny.gov/statistics/brfss/reports/docs/1802 brfss smoking.pdf

### Easy-to-Access NY State Provider Information for Treating Tobacco Addiction

o http://talktoyourpatients.ny.gov/

### **Electronic Cigarettes (E-Cigarettes)**

- o AAP E-Cigarette Fact Sheet
- <u>U.S. FDA e-Cigarettes</u> (Provides up-to-date information about the safety and regulation of e-Cigarettes.)

#### **Healthy Living Center**

- o (585) 530-2050
- o Provides evidence based intensive intervention with counseling and medication support in person to individuals, over 4 to 8 visits, living in Monroe County and the surrounding areas

#### Monroe County 2015 Adult Community Tobacco Survey Final Report

http://www.smokefreemonroe.com/file/sites%7C\*%7C366%7C\*%7CMonroe-County-2015-Adult-Community-Tobacco-Survey-Final-Report-2-23-15.pdf

### Know the Risks – E-cigarettes and Young People

o https://e-cigarettes.surgeongeneral.gov

#### **National Cancer Institute**

- Online pamphlet: Clearing the Air: Quit Smoking Today Describes tools that can help smokers stop smoking and the problems to expect when they quit.
  - http://smokefree.gov/sites/default/files/pdf/clearing-the-air-accessible.pdf
- o Online pamphlet: Clear Horizons Self-help manual for smokers age 50 and older.
  - http://smokefree.gov/sites/default/files/pdf/clear-horizons-accessible.pdf

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#### New York State Smokers' Quitline and Quitsite:

### 1-866-NY-QUITS, (1-866-697-8487) www.nysmokefree.com

- A free resource for tobacco users, which tobacco users can access themselves or to which clinicians can refer tobacco-using patients for assistance. Free, confidential coaching and cessation-related services are offered to patients who use tobacco products.
- Deaf, Hard of Hearing and Speech Disabled: Call NY Relay Services at 711 (Voice or TTY), Give Operator Quitline Number Cessation Coaching
- Text and Messaging Services
- Triage to Health Plan Programs

#### **Preventive Task Force Guidelines:**

 http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/tobacco-usein- adults-and-pregnant-women-counseling-and-interventions1

#### Smoking Health Action Community (SHAC) in Monroe County

- Provides ongoing initiatives to 1) Promote tobacco cessation, 2) Decrease social acceptability of tobacco use, 3) Prevent initiation of tobacco use among youth and young adults and 4) Eliminate exposure to secondhand smoke.
- Website: <u>www.smokefreemonroe.com/</u> Telephone: (585) 666-1399
- o Fax: (585) 442-4263

#### Smokefree.gov

- o Provides online resources. Smartphone apps are user friendly and easy to download.
- <u>Download free QuitStart smartphone apps</u> (created with teens in mind, but can be used by adults): http://smokefree.gov/apps-quitstart
- SmokefreeTXT (free interactive text messaging to help adults and young adults quit smoking)
- http://www.treatobacco.net/en/index.php

#### U.S Department of Health and Human Services. Smoking Cessation: A Report of the Surgeon General.

https://www.cdc.gov/tobacco/data statistics/sgr/2020-smoking-cessation/?s cid=OSH misc m180

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