Tobacco Use Disorder

Using Counseling and Medication Treatment to Help Veterans with Tobacco Cessation
VA PBM Academic Detailing Service
Real Provider Resources
Real Patient Results
Your Partner in Enhancing Veteran Health Outcomes

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Abbreviations

CrCl = creatinine clearance
ESRD = end-stage renal disease
GFR = glomerular filtration rate
HD = hemodialysis
mg = milligram
MH = mental health
min = minute
ml = milliliter
NRT = nicotine replacement therapy
OTC = over the counter
Rx = prescription medication
SR = sustained release
Fast Facts About Tobacco Use

- Tobacco users die 10 years earlier than non-users.¹⁻³
- Tobacco users with mental illness die several years earlier than individuals without a mental health disorder.⁴⁻⁶
- Half of all tobacco users will die of tobacco related causes.³

U.S. Deaths Annually from Cigarette Smoking 2005–2009⁷⁻¹⁰

- Heart Disease: 33%
- Lung Cancer: 29%
- Chronic Obstructive Pulmonary Disease (COPD): 3%
- Other Cancers: 7%
- Other Diagnoses: 7%
- Stroke: 21%
Brief Tobacco Cessation Counseling — the 5 As\textsuperscript{11}

**ASK** — about tobacco use at every visit.
- Ask about the type of tobacco and how long it has been used.

**ADVISE** — the Veteran to quit.
- Provide clear, strong, and personalized suggestions.

**ASSESS** — readiness to quit.
- Are you willing to quit in the next 30 days? These are the Veterans ready to quit.

**ASSIST** — Veterans with their quit attempt.
- Set quit date and provide information about strategies to help them quit, offer pharmacotherapy.

**ARRANGE** — follow up by phone or in clinic or refer to the VA Tobacco Quit Line (1-855-QUIT-VET).
- Refer Veteran to a more structured tobacco cessation program if additional assistance is needed.
Not Ready to Quit in the Next 30 Days? — Try Using the 5 Rs to Build Motivation

**RELEVANCE**  — What are some things that concern you about smoking?
For example, health concerns, affect on family, finances, etc.

**RISKS**  — What effect has tobacco had on your health?
Reviewing risks of using tobacco and then discussing the benefits of quitting helps increase motivation to quit. Focus on the health improvements from quitting.

**REWARDS**  — What will you gain by quitting tobacco?
Awareness of rewards helps maintain motivation during the quit attempt.

**ROADBLOCKS**  — What barriers do you see that may impact your ability to quit?
Common barriers are withdrawal symptoms, fear of failure, lack of support, depression, and being around other smokers. Identifying barriers and what has contributed to relapse in the past can help in planning for the next quit attempt.

**REPETITION**  — Ask readiness to quit at each encounter.
Ask permission to check in at the next visit. The more healthcare providers talk about tobacco cessation, the greater the likelihood a patient may try to stop.
## Medications for Tobacco Cessation — Monotherapy Dosing\textsuperscript{11,12}

<table>
<thead>
<tr>
<th>Generic Name</th>
<th>Usual Adult Dose</th>
<th>Starting Instructions</th>
<th>Comments</th>
</tr>
</thead>
</table>
| Nicotine Transdermal Patch (OTC)      | Smoking more than 10 cigarettes per day: 21 mg for four to eight weeks then 14 mg for two to four weeks then 7 mg for two weeks  
Smoking 10 or fewer cigarettes a day: 14 mg for six to eight weeks then 7 mg for two weeks | Typically start on quit day               | Can be used in combination with other NRT.  
Can be used in combination with bupropion.  
Rotate application sites; if having vivid dreams, remove patch before bedtime and apply a new patch in morning.  
Consider longer duration of treatment if necessary. |

*High dependence = smoking first cigarette of the day within 30 minutes of waking; **Low dependence = smoking first cigarette of the day more than 30 minutes after waking.
<table>
<thead>
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<th>Generic Name</th>
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<tbody>
<tr>
<td><strong>Nicotine Replacement Therapy (NRT)</strong></td>
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</table>
| Nicotine Polacrilex Gum (OTC)                | High dependence*: 4 mg every one to two hours for six weeks, then every two to four hours for three weeks, then every four to eight hours for three weeks  
Low dependence**: 2 mg every one to two hours for six weeks, then every two to four hours for three weeks, then every four to eight hours for three weeks  
Maximum dose: 24 pieces in 24 hours | Typically start on quit day  
Bite several times until peppery taste occurs, then “park” between cheek and gum until taste disappears. Repeat bite-and-park process for 30 minutes on each piece of gum. Avoid eating or drinking while using gum and avoid acidic drinks (e.g., coffee, juice, soda) for 15 minutes before using. Try to not swallow saliva when using nicotine gum since this nicotine in the stomach is poorly absorbed and causes stomach upset.  
Consider longer duration of treatment if necessary. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

*High dependence = smoking first cigarette of the day within 30 minutes of waking; **Low dependence = smoking first cigarette of the day more than 30 minutes after waking.
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</table>
| Nicotine Polacrilex Lozenge (OTC)| High dependence*: 4 mg every one to two hours for six weeks, then every two to four hours for three weeks, then every four to eight hours for three weeks  
Low dependence**: 2 mg every one to two hours for six weeks, then every two to four hours for three weeks, then every four to eight hours for three weeks  
Maximum dose: 20 lozenges in 24 hours | Typically start on quit day                                                      | Place between cheek and gum and dissolve slowly, shifting in mouth occasionally. Do not bite or chew. Avoid eating or drinking while using lozenge and avoid acidic drinks (e.g., coffee, juice, soda) for 15 minutes before using. Try to not swallow saliva when using nicotine lozenge since this nicotine in the stomach is poorly absorbed and causes stomach upset. Consider longer duration of treatment if necessary. |

*High dependence = smoking first cigarette of the day within 30 minutes of waking; **Low dependence = smoking first cigarette of the day more than 30 minutes after waking.
Generic Name | Usual Adult Dose | Starting Instructions | Comments
--- | --- | --- | ---
Nicotine Nasal Spray (Rx) | One spray in each nostril will provide a 1 mg dose. Weeks one to eight, use one to two doses/hour, then in weeks nine to 14, gradually reduce over four to six weeks until off completely. | Typically start on quit day | Do not use in patients with lung disease. Provides the highest plasma nicotine levels of the NRT products and most closely mimics smoking a cigarette. This may result in dependence on the nasal inhaler. Also has higher costs.

*High dependence = smoking first cigarette of the day within 30 minutes of waking; **Low dependence = smoking first cigarette of the day more than 30 minutes after waking.
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<tbody>
<tr>
<td>Nicotine Inhaler (Rx)</td>
<td>10 mg cartridges deliver 4 mg of nicotine with continuous puffing for 20 minutes. Can use in five-minute increments for each craving. Nicotine is absorbed in the mouth and throat. Weeks one to 12, use six to 16 cartridges/day, then in weeks 13 to 24, gradually reduce until off.</td>
<td>Typically start on quit day</td>
<td>Mechanism of use is very similar to smoking, so it may reinforce smoking behaviors. Can be time consuming to administer a dose comparable to the nicotine gum or lozenge. Also has higher costs.</td>
</tr>
</tbody>
</table>

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### Non-nicotine Oral Therapy

<table>
<thead>
<tr>
<th>Generic Name</th>
<th>Usual Adult Dose</th>
<th>Starting Instructions</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bupropion (Rx)</td>
<td>150 mg SR daily for three days, then increase to 150 mg SR twice daily; Use for eight to 12 weeks or longer if necessary for complete cessation.</td>
<td>Start seven to 14 days before quit day.</td>
<td>Do not need to taper dose when stopping. Do not crush or chew tablets. If insomnia occurs, take second dose in the afternoon rather than in the evening. May use bupropion in combination therapy with NRT.</td>
</tr>
<tr>
<td>Varenicline (Rx)</td>
<td>0.5 mg daily for days one through three, then 0.5 mg twice daily for days four through seven, then 1 mg twice daily; Use for 12 to 24 weeks.</td>
<td>Start seven to 35 days before quit day.</td>
<td>Take with food and eight ounces of water to reduce nausea (most common side effect ~30%). Discuss possibility of mood changes, depression, and suicidal ideation. Recommended to only use in Veterans with stable mental health (MH) conditions. Avoid if Veteran has had suicidal ideation in the past 12 months unless recommended by MH provider.</td>
</tr>
</tbody>
</table>

*High dependence = smoking first cigarette of the day within 30 minutes of waking; **Low dependence = smoking first cigarette of the day more than 30 minutes after waking.
<table>
<thead>
<tr>
<th>Medication</th>
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</tr>
</thead>
</table>
| Nicotine Patch + Nicotine Lozenge      | **Smoking 10 cigarettes or more per day:**  
On quit day: 21 mg patch daily and use 2 mg nicotine lozenge as needed for tobacco cravings (up to 10 lozenges a day). After at least four weeks and once use of lozenge is one or two pieces per day, reduce nicotine patch to 14 mg for two to four weeks, then to 7 mg for two to four weeks, then stop. Nicotine lozenge can be used as needed for tobacco cravings for six to 12 months if necessary to assist the Veteran in remaining abstinent.  
**Smoking less than 10 cigarettes per day:**  
On quit day: 14 mg patch daily and use 2 mg nicotine lozenge as needed for tobacco cravings (up to 10 lozenges a day). After at least six weeks and once use of lozenge is one or two pieces per day, reduce nicotine patch to 7 mg for two to four weeks, then stop. Nicotine lozenge can be used as needed for tobacco cravings for six to 12 months if necessary to assist the Veteran in remaining abstinent.  
May use nicotine 4 mg lozenge if Veteran has higher dependence, particularly with dual use of multiple tobacco/nicotine products. |

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11,12 Medications for Tobacco Cessation — Combination Therapy Dosing
### Medications for Tobacco Cessation — Combination Therapy Dosing

<table>
<thead>
<tr>
<th>Medication</th>
<th>Starting Instructions</th>
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</thead>
<tbody>
<tr>
<td>Nicotine Patch + Nicotine Gum</td>
<td>Similar schedule to Nicotine Patch + Nicotine Lozenge</td>
</tr>
<tr>
<td><strong>Combination Bupropion/NRT</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Bupropion + Nicotine Lozenge        | **Seven to 14 days before quit day:** Start 150 mg SR one tablet daily for three days, then increase to 150 mg SR twice daily. Continue for eight to 12 weeks; may continue longer if necessary to continue abstinence.  
**On quit day:** Start nicotine lozenge 2 mg using up to 10 lozenges per day for tobacco cravings. Taper use of lozenge every one to two weeks by incorporating use of regular gum, sugar-free candy, or other substitute. |
| Bupropion + Nicotine Gum            | **Seven to 14 days before quit day:** Start 150 mg SR one tablet daily for three days, then increase to 150 mg SR twice daily. Continue for seven to 12 weeks; may continue longer if necessary to continue abstinence.  
**On quit day:** Start nicotine gum 2 mg using up to 10 pieces per day for tobacco cravings. Taper use of gum every one to two weeks by incorporating use of regular gum, sugar-free candy, or other substitute. |
<table>
<thead>
<tr>
<th>Medication</th>
<th>Starting Instructions</th>
</tr>
</thead>
</table>
| Bupropion + Nicotine Patch | **Seven to 14 days before quit day:** Start 150 mg SR one tablet daily for three days, then increase to 150 mg SR twice daily. Continue for eight to 12 weeks; may continue longer if necessary to continue abstinence.  
**On quit day:** Start nicotine patch and use based on number of cigarettes smoked per day: 21 mg patch if ≥10 cigarettes per day or 14 mg patch if <10 cigarettes per day. Use nicotine patch in the same manner as described above for monotherapy and taper the dose as outlined. (see page 5). |
Pharmacotherapy for Smokeless Tobacco Users

Access for Nicotine Dependence

1. How soon after you wake up do you place your first dip?
   - Within 5 minutes ...... 3 points
   - 6–30 minutes ...... 2 points
   - 31–60 minutes ...... 1 point
   - After 60 minutes ...... 0 points

2. How many cans/pouches per week do you use?
   - More than 3 ...... 2 points
   - 2–3 ...... 1 point
   - 1 ...... 0 points

SCORING

Total: ________________________

5 ...... High Dependence
3–4 ...... Moderate Dependence
1–2 ...... Low Dependence
<table>
<thead>
<tr>
<th>Level of Dependence</th>
<th>Medication</th>
<th>Dosing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Moderate to high dependence or using one can every three days</strong></td>
<td>Nicotine patch 21 mg and nicotine gum or lozenge 2 mg*</td>
<td>• One patch every 24 hours for at least four to six weeks**&lt;br&gt;• Six to 10 lozenges or pieces of gum per day as needed for breakthrough cravings&lt;br&gt;• Reduce patch to 14 mg once use of the lozenge or gum is down to one or two a day. Use 14 mg patch for at least two weeks and once use of the lozenge or gum is down to one or two a day, start the 7 mg patch and use for at least two weeks before stopping.</td>
</tr>
<tr>
<td><strong>Low dependence</strong></td>
<td>Nicotine patch 14 mg and nicotine gum or lozenge 2 mg*</td>
<td>• One patch every 24 hours for at least four to six weeks**&lt;br&gt;• Six to 10 lozenges or pieces of gum per day as needed for breakthrough cravings&lt;br&gt;• Reduce patch to 7 mg once use of the lozenge or gum is down to one or two a day. Use 7 mg patch for at least two weeks before stopping.</td>
</tr>
</tbody>
</table>

*If the 2 mg lozenges or gum are not working, consider using the 4 mg lozenge or gum. **Treatment extending to six months or longer may be needed in some patients for long-term abstinence. ***Refer to the Criteria for Use for Varenicline: https://www.pbm.va.gov/apps/VANationalFormulary/.
## Pharmacotherapy for Smokeless Tobacco Users

<table>
<thead>
<tr>
<th>Level of Dependence</th>
<th>Medication</th>
<th>Dosing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-nicotine Oral Therapy</strong></td>
<td></td>
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</tbody>
</table>
| **Low, moderate and high dependence** | Bupropion | • 150 mg SR once a day for three days, then increase to one tablet twice daily for seven to 12 weeks, but can extend longer (up to six months if necessary).  
• Start one to two weeks before quit date.  
• See information on page 12 for more details on combination bupropion/NRT. |
| | Combine with short-acting NRT for improved efficacy, using on an as-needed basis for breakthrough cravings (six to 10 times a day). | |
| **Low, moderate and high dependence** | Varenicline | • Start with 0.5 mg daily for three days, then increase to 0.5 mg twice a day for four days, then increase to 1 mg twice daily for 12 to 24 weeks.  
• Reduce dose to 0.5 mg twice daily if CrCl <30 ml/min.  
• See information on page 10 for more information.*** |

*If the 2 mg lozenges or gum are not working, consider using the 4 mg lozenge or gum. **Treatment extending to six months or longer may be needed in some patients for long-term abstinence. ***Refer to the Criteria for Use for Varenicline: [https://www.pbm.va.gov/apps/VANationalFormulary/](https://www.pbm.va.gov/apps/VANationalFormulary/).
## Dose Adjustments in Renal or Hepatic Disease\textsuperscript{12,13}

<table>
<thead>
<tr>
<th>Dosage Adjustments</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Generic Name</strong></td>
<td><strong>Hepatic Impairment</strong></td>
<td><strong>Renal Impairment</strong></td>
</tr>
<tr>
<td><strong>NRT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nicotine patch, gum, lozenge, inhaler and nasal spray</td>
<td>No dose adjustment needed</td>
<td>No dose adjustment needed</td>
</tr>
<tr>
<td><strong>Oral Agents</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bupropion (Rx)</td>
<td><strong>Mild impairment (Child-Pugh score 5–6): Use with caution, reduce dose and/or frequency: 150 mg SR once daily.</strong></td>
<td>GFR &lt;90 ml/min: Reduce dose and/or frequency.</td>
</tr>
<tr>
<td></td>
<td><strong>Moderate to severe impairment (Child-Pugh score 7–15): Use with extreme caution, maximum dose 150 mg SR every other day.</strong></td>
<td></td>
</tr>
<tr>
<td>Varenicline (Rx)</td>
<td>No dosing adjustment necessary.</td>
<td>CrCl &lt;30 ml/min: Start at 0.5 mg once daily with maximum dose 0.5 mg twice daily; ESRD/HD: 0.5 mg once daily</td>
</tr>
</tbody>
</table>
Tapering regimen for a patient with high nicotine dependence with 21 mg patch and as needed 2 mg lozenges. Patch is dosed as strength per 24 hours and lozenges are in pieces per day.
# Smoking and Drug Interactions

<table>
<thead>
<tr>
<th>Drug</th>
<th>Effect from Smoking*</th>
<th>Recommendations After Quitting Smoking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alprazolam</td>
<td>May decrease plasma concentrations up to 50%.</td>
<td>Monitor patient; may need dose reduction.</td>
</tr>
<tr>
<td>Caffeine</td>
<td>May increase clearance by 56%.</td>
<td>Decrease intake by 50%; note that caffeine is a trigger for tobacco use.</td>
</tr>
<tr>
<td>Chlorpromazine</td>
<td>Decreases concentration by 24%; patients who smoke may need a higher dose.</td>
<td>Monitor patient; may need dose reduction.</td>
</tr>
<tr>
<td>Clozapine</td>
<td>Decreases concentration up to 30–40%; patients who smoke may need a higher dose.</td>
<td>Monitor patient; may need a dose reduction of 30–40%.</td>
</tr>
<tr>
<td>Fluvoxamine</td>
<td>Decreases plasma concentration by 32%.</td>
<td>Dose reductions may not be needed; monitor patient for adverse effects.</td>
</tr>
<tr>
<td>Haloperidol</td>
<td>Decreases serum concentrations up to 70%; patients who smoke may need a higher dose.</td>
<td>Monitor patient; may need to reduce dose.</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>Decreases serum concentrations by 10–30%; patients who smoke may need a higher dose.</td>
<td>Monitor patient; may need to reduce dose.</td>
</tr>
</tbody>
</table>

*Polyaromatic hydrocarbons in tobacco smoke cause induction of CYP1A2 enzymes. Nicotine is not involved in causing the drug interactions. Enzyme activity returns to normal after smoking cessation. Note: Tobacco that is not burned and smoked (e.g., smokeless tobacco) does not cause induction of CYP1A2 enzymes. Nicotine replacement therapy does not influence CYP1A2 enzyme.
Additional Resources

- VA Tobacco Quit Line — 1-855-QUIT-VET (1-855-784-8838)
  A proactive, smoking cessation national quit line with counselors available Monday – Friday
  - Information for Veterans and providers: http://www.mentalhealth.va.gov/quit-tobacco/
  - Information is available in English and Spanish.
  - For Veterans who are in crisis, a warm transfer is made by the counselor to the Veterans Crisis Line.

If you do not have time to follow up with the Veteran after their appointment, try the Ask-Advise-Prescribe-Refer (AAPR) method:

**ASK**
1. **Ask** about tobacco use.

**ADVISE**
2. **Advise** the Veteran to quit.

**PRESCRIBE**
3. **Prescribe** tobacco cessation medications.

**REFER**
4. **Refer** the Veteran to tobacco cessation services offered by the facility or the VA Tobacco Quit Line 855-QUIT-VET (855-784-8838).
- **SmokefreeVET**
  A mobile text message smoking cessation service for Veterans
  - Assist Veterans in signing up at their visit—it takes only a few minutes!
  - Text the word VET to 47848.
  - For more information: [www.smokefree.gov/VET](http://www.smokefree.gov/VET)
  - SmokefreeVET en Español: [www.smokefree.gov/VETespanol](http://www.smokefree.gov/VETespanol)

- **Stay Quit Coach Mobile Application**
  [https://mobilehealth.va.gov/app/stay-quit-coach](https://mobilehealth.va.gov/app/stay-quit-coach)
  - Download from iTunes or Android App Stores.
  - Includes tools to control cravings and triggers.
  - Discusses benefits of quitting and the risks of smoking.
  - Tips and motivation
  - Tracks progress, including quit dates, money saved and health benefits
  - Assist Veterans in signing up at their visit—it takes only a few minutes!
Quit for Good with Nicotine Replacement Therapy
Interactive webpage for Veterans including:
- A selection tool to choose over-the-counter, evidence-based, tobacco cessation treatment
- Tailored quit tips and downloadable fact sheets for the therapy chosen
- Short videos that portray correct use of NRT
- A nicotine dosage calculator for cigarette smokers and smokeless tobacco users
- Facts about nicotine.

References


15. Zullino DF1, Delessert D, Eap CB, et.al.Tobacco and cannabis smoking cessation can lead to intoxication with clozapine or olanzapine. Int Clin Psychopharmacol. 2002 May;17(3):141–3.


U.S. Department of Veterans Affairs

This reference guide was created to be used as a tool for VA providers and is available to use from the Academic Detailing SharePoint. These are general recommendations only; specific clinical decisions should be made by the treating provider based on an individual patient’s clinical condition.

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PharmacyAcademicDetailingProgram@va.gov

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