Nicotine Patch

•Patch sticks to the skin with adhesive. Nicotine absorbed through the skin - enters the body slowly

•Provides nicotine over a 24-hour period

•Strongest urges are often when a person first wakes up so keep it on at night if possible

•Move it from one place to another every day

Nicotine Patch

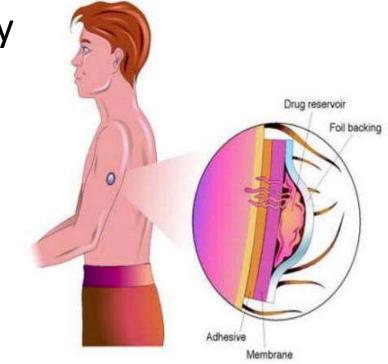
- Dosing
 - 21 mg, 14 mg, or 7 mg every 24 hours
 - Taper to lower level after 4-6 weeks
 - Taper to lowest level after additional 2-4 weeks

• Advantages - consistent level of nicotine delivered



Nicotine Patch: Patient Education

- Promptly apply after removing from protective pouch
- Apply patch once daily to clean, non-hairy, dry are on upper body
- Wash hands with water after application (NOT soap)
- Discard by folding in half (sticky side in), place in protective pouch, and discard



Nicotine Patch- Most Common Side Effects

Skin irritation	19.5%, mainly mild Only 7% actually stop the patch due to this
Adhesive allergy	0.3% of folks will be allergic to adhesive (look for a rash extending outside of where the patch was on skin)
Nausea	8.5% symptom of too much nicotine
Dizziness	7.3% symptom of too much nicotine
Insomnia	11.4% symptom of too much nicotine

Immediate Release Nicotine

•Nicotine gum, lozenge, inhaler and nasal spray

•Is not as fast or as high of dose as cigarettes, but gives an increase of nicotine fairly quickly

•Helps with managing triggers and urges

•Use with long-lasting smoking cessation meds

Examples of routines/situations associated with tobacco use:

When drinking coffee	After meals or after sex
While driving in the car	During breaks at work
When bored or stressed	While on the telephone
While watching television	While with specific friends or family
While at a bar with friends	members who use tobacco

Nicotine Gum + Lozenges

- Use with long-acting meds
- Lowest side effect profile
- Use alone if side effects to other meds
- Teach!! "Park between cheek and gum"

Nausea	16-17%- could be due to incorrect technique
Headache	9-10%
Mouth soreness	5.4%



NRT GUM



- To cover/pre-treat breakthrough cravings with patches or oral medications
- Right starting dose–2mg or 4 mg if smoke within 30 min of awakening; lower dose over next 8-12 wk
- Right dosing schedule
 - First 6 weeks 1 piece every 1-2 hours use at least 9 pieces per day (max 24)
 - Next 6 weeks 1 piece every 2-4 hours, then every 4-8 hours (wean by 1 piece every 4-7 days)
- Technique different from regular chewing gum
 - Bite down slowly until feel tingle THEN park ~ 1 min between cheek & gums (to absorb nicotine)
 - Repeat chew and park cycles until tingling stops (~ 30 minutes)
 - occasionally change (cheek & gum) parking spot
- No food/drink 15 minutes before or during use. Acidic food/drinks (soda & coffee) interfere w/nicotine absorption
- Keep out of reach of children and pets.

Nicotine Lozenge

- Dosing based on time to first cigarette (TTFC)
 - TTFC <30 minutes: 4 mg TTFC >30 minutes: 2 mg
 - 1 lozenge every 1-2 hours for 6 weeks, then
 - 1 lozenge every 2-4 hours next 3 weeks
 - then 1 lozenge every 4-8 hours for 3 weeks
- Side Effects heartburn/indigestion, hiccups, nausea
- Advantages: ease of use, relief from cravings
- Patient instructions:
 - Do not chew lozenge limit swallowing
 - Move from one side of the mouth to the other occasionally
 - Do not eat or drink within 15 minutes of using lozenge
 - Avoid acidic beverages prior and during use



Max dose:

20 lozenges per day or
5 per 6 hours



Nicotine Mini-Lozenge

- Breath mint-sized lozenges
- Dissolve up to 3x faster
- Available: 2mg and 4mg Mint
- Patient education:
 - Do not eat or drink 15 min before, during, or after lozenge
 - Avoid acidic beverages prior to and during use
 - Do not chew, suck or swallow
 - Put between cheek and gum
 - Move around from one side to the other



How to use Nicotine Replacement Therapy

Nicotine patch & nicotine gum OR lozenge work best when used TOGETHER

Using the nicotine patch together with either nicotine gum or the nicotine lozenge makes it more likely you will be tobacco-free for good. The nicotine patch fights your cravings all day. However, some situations – like after a meal – may trigger you to want to use tobacco. That's when it's good to have your nicotine gum or lozenge handy. These products will help you avoid tobacco even in tough situations.



- Apply the patch at about the same time every day to clean, dry, hairless skin. Be sure to throw out your old patch.
- Move the spot where you put the patch each day.
- Don't use creams or lotions on the skin where you put the patch because they may cause the patch not to stick.
- Apply a new patch on a different spot if one falls off.
- If you have mild itching or redness where you put the patch, apply a little hydrocortisone cream on it. Call your health care provider or Quit Coach if you get a rash two or more inches beyond the patch.
- If you have vivid dreams or can't sleep with the patch on, remove the patch at bedtime and apply a new one in the morning.

Side effects include: mild itching or redness at the point of application, headache, trouble sleeping, vivid dreams





- Slowly chew one piece of gum until you notice a peppery taste or feel a slight tingling in your mouth.
- Stop chewing and put ("park") the gum between your cheek and gum.
 When the taste or tingling is almost gone, chew the gum again until you taste it.
- Continue chewing and "parking" the gum in different places for about 30 minutes to get the full dose.
- Do not chew too fast or chew more than one piece at a time.
- Do not drink acidic beverages, such as citrus fruit juices, coffee, soft drinks, or tea within 15 minutes before or while chewing a piece of gum.

Side effects may be: mouth/jaw soreness, hiccups, sore throat, and if the gum is not chewed right: nausea or vomiting, lightheadedness



- Put the lozenge between your cheek and your gum, let is slowly dissolve for 20-30 minutes.
- Do not bite or chew the lozenge like hard candy. Do not swallow the lozenge. Try not to swallow most of the dissolved medicine, the nicotine absorbs into your cheek.
- Move the lozenge occasionally to different spots in your mouth.
- Do not eat or drink for 15 minutes before using a lozenge.

Side effects include: nausea, mouth irritation, sore throat, trouble sleeping



NC Department of Health and Human Services • Division of Public Health • Tobacco Prevention & Control Branch www.quitlinenc.com • 1-800-QUIT-NOW • NCDHHS is an equal opportunity employer and provider. • 07/2019

Educational Handout on how to use NRT: QuitLineNC.com

Nicotine Matching Offers Best Results

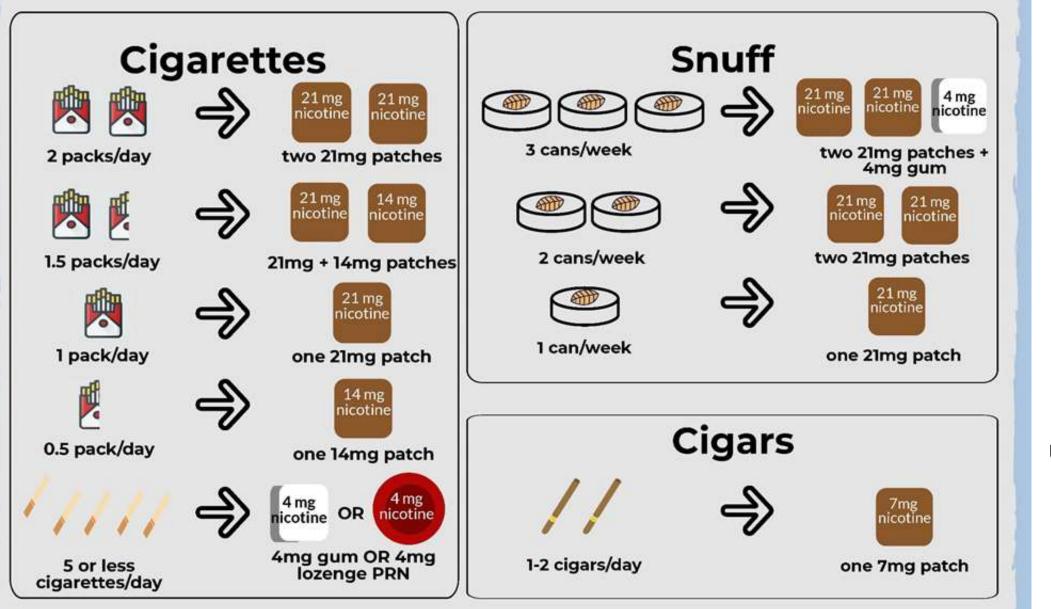
Number of cigarettes	Dosing
1-10 cigarettes/day	14mg patch + gum/lozenge
11-20 cigarettes/day	21mg patch + gum/lozenge
21-30 cigarettes/day	21mg + 14mg patches + gum/lozenge
31-40 cigarettes/day	42mg (two 21 mg patches) + gum/lozenge

Black n' mild cigar= nicotine in one pack of cigarettes Menthol products may require higher doses of NRT

Nicotine Content Comparison

Product	Nicotine Content
Cigarettes	1.1 - 1.8 mg per cigarette (22 - 36 mg / pack)
E-cigarettes	0.5-15.4mg (15 puffs) vary greatly between brands
Cigars	13.3 mg average
Mini-cigars	3.8 mg per mini-cigar = 76 mg / pack
Pipe	5.2 mg average per bowl
Chewing/dipping can	88 mg per can of dip per chew
Loose leaf pouch	144 mg per pouch
Hookah (water pipe)	1.04mg/puff; One 45 - 60 min session = ~1 pack of cigarettes in nicotine and tar content

Nicotine Replacement Equivalencies*



From University of Kentucky School of Nursing "Medicaid stopped covering my nicotine patches/gums/lozenges"

- NRT is OTC but requires a valid (max 1 year) Rx for NC Medicaid to cover (pharmacists can provide now)
- Not all products are covered only certain (rebatable) NDCs
- QuitLine has a list of covered NDCs
- To ensure patient's/client's pharmacotherapy is covered:
 - Call & request the pharmacy use one of the NRTs on the NDC list OR
 - Add in the Notes to Pharmacy section of your NRT Rxs for Medicaid recipients: "Pharmacy - Please fill with a Medicaid-covered NDC. For a current list call NC Tracks at 1-800-688-6696."



Nicotine Replacement Therapy (NRT) Facts

• Does it work?

• Meds + Counseling = Doubles quit rate!

Counseling strategy:

- Raise patient awareness about withdrawal symptoms
- Troubleshoot past experience with NRT
- Investigate past dosing
- Meet with patient on desire to ease pain of quitting



Nicotine Replacement Therapy (NRT) Can it be too much?

- Nicotine replacement therapy is over-the-counter for a reason: it's safe!
- You can smoke while using patch/gum/lozenge
- Nicotine in the patch + gum/lozenge doesn't equal the amount you receive from smoking cigarettes or other forms of tobacco
- Nicotine overdose is RARE...Most common symptoms of too much nicotine: MILD nausea/lightheadedness
- 2018 Randomized controlled trial, "No evidence that the use of smoking cessation pharmacotherapies increased the risk of serious cardiovascular adverse events during or after treatment was observed."

