INTRODUCTION

- Menthol cigarettes are used disproportionately by African-American, female, and adolescent smokers, who have been targeted with menthol marketing.2
- Twitter, used disproportionately by younger & racial/ethnic minority populations, provides insight into use and perceptions of menthol cigarettes.
- The purpose is to identify the frequency of content, popular sentiment, social norms, and (mis)perceptions of menthol cigarettes on Twitter to inform communication about these products, particularly to vulnerable subgroups.

METHODS

- Tweets from database of over 47M tobacco-related messages gathered prospectively from the Twitter Firehouse of all public tweets and metadata.
- Menthol-related keywords (n=141,524) precision tested using human and machine-classification.
- This process identified n=94,627 menthol-relevant tweets from Feb 1, 2012 - Jan 31, 2013 (1 yr).
- Human coded 7,000 tweet random sample (7.4%) (4 coders) to assess the following characteristics:
  - Themes about menthol cigarettes (e.g., taste)4
  - Mention of populations with higher menthol use
  - Other tobacco or substance use (and menthol)
  - Likely smoking status of Twitter user
  - Tweet sentiment toward menthol cigarettes
- Of 7,000 coded tweets, 5% excluded: non-English or not related to menthol cigarettes (n=6,657 analytic sample proxy for larger sample)

RESULTS

Figure 1. Percent of Tweets by Theme (n = 6,657)
(Tweets can have multiple themes)

Table 1. Tweet Examples by Theme

Table: Tweet Examples (Sentiment toward menthol cigarettes +/-)

Theme | Tweet Examples (Sentiment toward menthol cigarettes +/-)
--- | ---
Smoking | Listening to music and smoking a port so relaxed (+) So pissed off I'm smoking a Newport #stressed #hate life (-)
Taste | Newport >>>>>>> any other cigarette (+) Menthol cigarettes are disgusting. (-)
Addiction | You know you're addicted to cigarettes when you consider chewing gum and smoking simultaneously. I don't even like menthols. (-)
Health Concerns | These Newport's gone be the death of me I gotta stop smoking them cancer sticks (-)
Cessation | #PleaseDon'tAskMe to stop smoking. I like newports godtannn!!!! (+) Day 4 not smoking. I do miss the taste of a Newport, but I'd rather smell the than fertilize them (-)
Tobacco Control | EU are menthol! Now eurocrats want to ban menthol cigarettes in new draconian proposals. They should butt out. (+) Seriously those commercials of the people with the hole in their throat made me quit smoking I haven't had a Newport in days (-)
Marketing | I got a coupon for some free camel crush cigs... they weren't bad lol (+) It sad when Newports send you a coupon for your birthday wow I need to stop smoking (-)
Marijuana | Menthols are needed after smoking marijuana preferably Newports (+) I need to stop my bad habits -SMOKING weed nd Newport's Ugh!!! (-)
African American | Why do black people have a fetish with Newport cigarettes? (-)

CONCLUSIONS

- Menthol content on Twitter is driven by smokers who are more positive about menthol cigarettes.
- Public health concerns (cessation, health, tobacco control) are dwarfed by this larger conversation.
- Tweets reflect linkage of menthol cigarettes with populations that have historically been targeted by menthol marketing and have a higher use prevalence.
- Twitter users frequently mention marijuana and menthol; popular song lyrics often discuss both together
- Framing public communication about menthol can be guided by public opinions shown through social media.