

Supplemental file 1: Coding Scheme for Tweets

Manual annotation of Tweets: The following coding scheme was used for binary classification of whether the tweet discussed nicotine sickness (including first-hand or second-hand experiences), intentional overconsumption of nicotine, intent to quit, mention of product type/brand, or withdrawal symptoms not related to nicotine sickness.

| THEME/SUB-THEME | SIGNAL | CODING SCHEME |
|---|--------|--|
| Nicotine Sickness Symptom Reporting (First-hand/Second-hand) | YES | <ul style="list-style-type: none"> • Mention of specific nicotine sickness symptoms such as vomiting, nausea, headache, burning sensation in throat, fatigue (varied severity) during or after nicotine use. • Reporting nicotine sickness symptoms of self or friends/family/neighbors (mention of relationship, tagging the profile of other users). • Reporting visiting clinic/urgent care/ER or hospitalization for alleged nicotine sickness symptoms. • Users seeking suggestions on overcoming nicotine sickness symptoms. |
| | NO | <ul style="list-style-type: none"> • Tweeting news posts related to nicotine sickness. • Tweets on nicotine sickness symptoms by users or public health organizations to create awareness about nicotine sickness. • Nicotine sickness due to exposure in tobacco fields. • Tweets unrelated to nicotine sickness using the hashtag “nic sick”. • Sarcasm/jokes about nicotine sickness. |
| a. Intentional overconsumption of nicotine | YES | <ul style="list-style-type: none"> • Reporting intentional use of nicotine over and above one’s tolerance level to experience “nicbuzz”. |

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| b. Intent to quit | YES | <ul style="list-style-type: none"> • Users discussing nicotine sickness symptoms and an alleged intent to quit nicotine use due to unpleasant adverse effect. |
| c. Mention of product type/brand | YES | <ul style="list-style-type: none"> • Users discussing nicotine sickness symptoms during or after use of a specific nicotine product or brand (e.g., JUUL, Puff Bar etc.,) |
| d. Withdrawal symptoms (not related to nicotine sickness) | YES | <ul style="list-style-type: none"> • Users discussing varied symptoms or adverse effects associated with nicotine withdrawal. |