

## Multimedia Appendix 2

### Themes in e-cigarette tweets mentioning the Chicago Department of Public Health in January, 2014.

| Theme           | Sentiment   | Definition  | Example tweet  | All<br>n=683   | Tweets<br>n=255<br>n (%) | Retweets<br>n=428 |
|-----------------|-------------|---|--|----------------|--------------------------|-------------------|
| Safety          |             |   |  |                |                          |                   |
|                 | Pro-policy  | e-cigarettes are harmful, foster nicotine addiction, promote smoking                      | RT @ChiPublicHealth: Electronic cigs contain a dangerous, addictive drug & should be regulated like other nicotine products #ecigtruths htt... | 14<br>(2.0%)   | 2<br>(0.8%)              | 12<br>(2.8%)      |
|                 | Anti-policy | e-cigarettes are safer than alternative, promote cessation                                | @ChiPublicHealth it's not about being safe, it's about being SAFER than the alternative #EcigsSaveLives it's about HARM REDUCTION #Casaa       | 358<br>(52.4%) | 87<br>(34.1%)            | 271<br>(63.3%)    |
| Lies/propaganda |             |   |  |                |                          |                   |
|                 | Pro-policy  | Propaganda/ lie spread by e-cigarette industry or supporter                               | N/A  | 0 (0%)         | 0 (0%)                   | 0 (0%)            |
|                 | Anti-policy | Propaganda/ lie spread by health department or other government                           | @ChiPublicHealth Baseless nonfactual propaganda anyone? So much for public health. #GetAClue #ecigtruths #LiesToldOnTwitter                    | 224<br>(32.8%) | 108<br>(42.4%)           | 116<br>(27.1%)    |
| Science         |             |   |  |                |                          |                   |
|                 | Pro-policy  | Studies find some ingredients are carcinogenic, increased use by kids; need more research | @AmerAcadPeds @ChiPublicHealth Time for local & FDA action to protect youth from e-cigs & toxins in both vapor and smoke #SGR50 #putkids1st    | 19<br>(2.8%)   | 3<br>(1.2%)              | 16<br>(3.7%)      |
|                 | Anti-policy | Science shows e-cigarettes  | @ChiPublicHealth "Vaping: it's not smoking   | 218<br>(31.9%) | 62<br>(24.3%)            | 156<br>(36.4%)    |

|                |             |   |   |                |               |                |
|----------------|-------------|---|---|----------------|---------------|----------------|
|                |             | contain only nicotine and water, no dangerous secondhand vapor                      | <a href="http://t.co/Kkinhzb9JU">http://t.co/Kkinhzb9JU</a><br>No smoke. No carcinogens. No shame. #EcigsSaveLives #Casaa #IMPROOF  | )              | )             |                |
| Flavor         |             |   |   |                |               |                |
|                | Pro-policy  | Sweet flavors are for kids  | RT @ChiPublicHealth: “9 Terribly Disturbing Things About Electronic Cigarettes”<br><a href="http://t.co/IhMWnol1J7">http://t.co/IhMWnol1J7</a><br>via @HuffPostBiz<br>#ecigtruths | 2<br>(0.3%)    | 0 (0%)        | 2 (0.5%)       |
|                | Anti-policy | Adults like flavors too   | @choucair<br>@ChiPublicHealth no one advocates children smoking. that said, my favorite flavor is of strawberries and watermelon. i cant enjoy?                                   | 25<br>(3.7%)   | 20<br>(7.8%)  | 5 (1.2%)       |
| Regulation     |             |   |   |                |               |                |
|                | Pro-policy  | Ingredients, look, and use are like cigarettes, should be regulated like cigarettes | RT @IllinoisAFP:<br>@ChiPublicHealth If it looks like a cigarette & contains nicotine like a cigarette, it should be regulated like a cigarett...                                 | 44<br>(6.4%)   | 10<br>(3.9%)  | 34<br>(7.9%)   |
|                | Anti-policy | Regulation is a slippery slope, do not need nanny state                             | @IllinoisAFP<br>@ChiPublicHealth it looks like a gun, has a trigger like a gun. Let’s ban nerf and water guns!  | 169<br>(24.7%) | 61<br>(23.9%) | 108<br>(25.2%) |
| Issue salience |             |   |   |                |               |                |
|                | Pro-policy  | E-cigarettes are an important threat to public health                               | N/A   | 0 (0%)         | 0 (0%)        | 0 (0%)         |
|                | Anti-policy | Health department should focus on more serious health threats                       | @ChicagosMayor<br>@ChiPublicHealth Y not focus on more free hlth care N staff at the safe passage. Protect kids by  | 16<br>(2.3%)   | 8<br>(3.1%)   | 8 (1.9%)       |

actually protecting them.