This report is an effort to summarize social media conversations around COVID-19 issues in Pennsylvania, focusing on vaccination. It contains an analysis of the general topics about the current pandemic, such as COVID-19 regulations, mandates, masks, pro-and anti-vaccination campaigns, as well as other topics related to COVID-19 misinformation, disinformation, conspiracy theories, and vaccine hesitancy messages.

The material contained in this report is a summary of social media content and does not represent a judgment or characterization of any individual.
Trends (tweets per week) September 3 – September 9

**High Level View by City September 3 – September 9**

- Tweets here counted only if there is a city location attached
- Less Twitter data overall, due to holiday weekend
- Trending conversation this week:
  - Ivermectin

<table>
<thead>
<tr>
<th>Total PA</th>
<th>Philadelphia</th>
<th>Pittsburgh</th>
<th>Erie</th>
<th>Allentown/Bethlehem</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conversation</td>
<td>Tweets</td>
<td>Tweets</td>
<td>% Tweets</td>
<td>Tweets</td>
<td>% Tweets</td>
</tr>
<tr>
<td>Overall Vaccine</td>
<td>92342</td>
<td>55186</td>
<td>59.8%</td>
<td>22352</td>
<td>24.2%</td>
</tr>
<tr>
<td>Vaccine Passports</td>
<td>2846</td>
<td>1560</td>
<td>2.8%</td>
<td>685</td>
<td>3.3%</td>
</tr>
<tr>
<td>FDA Approval</td>
<td>891</td>
<td>411</td>
<td>0.7%</td>
<td>303</td>
<td>1.4%</td>
</tr>
<tr>
<td>Boosters</td>
<td>1746</td>
<td>874</td>
<td>1.6%</td>
<td>402</td>
<td>1.8%</td>
</tr>
<tr>
<td>Misinfo: Shading</td>
<td>38</td>
<td>22</td>
<td>0.0%</td>
<td>9</td>
<td>0.0%</td>
</tr>
<tr>
<td>&quot;Experimental&quot;</td>
<td>257</td>
<td>137</td>
<td>0.2%</td>
<td>51</td>
<td>0.2%</td>
</tr>
<tr>
<td>Children</td>
<td>1678</td>
<td>998</td>
<td>1.8%</td>
<td>363</td>
<td>1.6%</td>
</tr>
<tr>
<td>Myocarditis</td>
<td>138</td>
<td>98</td>
<td>0.2%</td>
<td>15</td>
<td>0.1%</td>
</tr>
<tr>
<td>Heart</td>
<td>1099</td>
<td>703</td>
<td>1.3%</td>
<td>206</td>
<td>0.9%</td>
</tr>
<tr>
<td>Masks</td>
<td>717</td>
<td>3912</td>
<td>7.1%</td>
<td>1566</td>
<td>7.0%</td>
</tr>
<tr>
<td>Infertility</td>
<td>30</td>
<td>20</td>
<td>0.0%</td>
<td>6</td>
<td>0.0%</td>
</tr>
<tr>
<td>Mandates</td>
<td>5745</td>
<td>3154</td>
<td>5.7%</td>
<td>1352</td>
<td>6.0%</td>
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<tr>
<td>Natural Immunity</td>
<td>821</td>
<td>562</td>
<td>1.0%</td>
<td>151</td>
<td>0.7%</td>
</tr>
<tr>
<td>Efficacy</td>
<td>274</td>
<td>125</td>
<td>0.2%</td>
<td>67</td>
<td>0.3%</td>
</tr>
<tr>
<td>Spike Proteins</td>
<td>77</td>
<td>37</td>
<td>0.1%</td>
<td>12</td>
<td>0.1%</td>
</tr>
<tr>
<td>Delta Variant</td>
<td>2088</td>
<td>1226</td>
<td>2.2%</td>
<td>412</td>
<td>1.8%</td>
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<tr>
<td>Race</td>
<td>1391</td>
<td>816</td>
<td>1.5%</td>
<td>350</td>
<td>1.6%</td>
</tr>
<tr>
<td>Ivermectin</td>
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<td>834</td>
<td>1.5%</td>
<td>384</td>
<td>1.7%</td>
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<tr>
<td>Military</td>
<td>286</td>
<td>150</td>
<td>0.3%</td>
<td>66</td>
<td>0.3%</td>
</tr>
<tr>
<td>Breakthrough</td>
<td>517</td>
<td>310</td>
<td>0.6%</td>
<td>112</td>
<td>0.5%</td>
</tr>
</tbody>
</table>
High Level View by County September 3– September 9

- Tweets counted here if there is a county location attached
- Race: pulled by one of the vaccine keywords plus at least one other term in ("Black", “African American”, “of color”, “Latin”, “Hispanic”, “brown”, “eugenic”)

<table>
<thead>
<tr>
<th>County</th>
<th>Allegheny</th>
<th>Beaver</th>
<th>Butler</th>
<th>Cambria</th>
<th>Fayette</th>
<th>Indiana</th>
<th>Somerset</th>
<th>Westmoreland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Vaccine</td>
<td>22758</td>
<td>24</td>
<td>52</td>
<td>26</td>
<td>33</td>
<td>9</td>
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<td>56</td>
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<tr>
<td>Vaccine Passports</td>
<td>694</td>
<td>1</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>Not FDA Approved</td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>Boosters</td>
<td>415</td>
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<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
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</tr>
<tr>
<td>Misinfo: Shedding</td>
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<tr>
<td>“Experimental”</td>
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<td></td>
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<tr>
<td>Children</td>
<td>370</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
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<td></td>
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<tr>
<td>Masks</td>
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<td>3</td>
<td>9</td>
<td>4</td>
<td>6</td>
<td>1</td>
<td>4</td>
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<td></td>
</tr>
<tr>
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<td>1</td>
<td>3</td>
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<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Natural Immunity</td>
<td>152</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>1</td>
<td></td>
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<tr>
<td>Efficacy</td>
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<td></td>
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<td></td>
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</tr>
<tr>
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<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Delta Variant</td>
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<td>1</td>
<td></td>
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<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Ivermectin</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breakthrough</td>
<td>114</td>
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<td></td>
</tr>
</tbody>
</table>

Top Words Used per Week September 3– September 9
Top Hashtags by County September 3– September 9

- We’ve checked hashtags in several counties such as Allegheny, Beaver, Butler, Cambria, Fayette, Indiana, Somerset, and West Moreland. After removing hashtags that were part of our search criteria, the top 5 hashtags for each county related to COVID19/vaccines are as follows:

<table>
<thead>
<tr>
<th>County</th>
<th>Hashtags</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allegheny</td>
<td>ronaron (993) Protein (3) novaccine (2) maskmandate (1)</td>
</tr>
<tr>
<td>Beaver + Butler</td>
<td>covid19 (796) covid (2) vaccinated (2) mybodymychoice (1)</td>
</tr>
<tr>
<td>Cambria</td>
<td>resist (156) covidvaccine (2) vaccinehero (2) texastaliban (1)</td>
</tr>
<tr>
<td>West Moreland</td>
<td>vaccine (103) mrna (1) covid (1)</td>
</tr>
<tr>
<td></td>
<td>covid (97) idiots (1) quarantine (1)</td>
</tr>
</tbody>
</table>

Top Hashtags by City September 3– September 9

- After removing hashtags that were part of our search criteria, the top 5 hashtags for each region related to COVID19/vaccines are as follows:

<table>
<thead>
<tr>
<th>City</th>
<th>Hashtags</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philadelphia</td>
<td>covid19 (910) covid19 (140) covid19 (171)</td>
</tr>
<tr>
<td></td>
<td>ronaron (399) ronaron (38) ronaron (58)</td>
</tr>
<tr>
<td></td>
<td>covid (353) deltavariant (31) getvaccinated (54)</td>
</tr>
<tr>
<td></td>
<td>vaccine (279) demvoice (28) vaccine (47)</td>
</tr>
<tr>
<td></td>
<td>colts (258) vaccine (27) vaccineswork (44)</td>
</tr>
<tr>
<td>Chester</td>
<td>covid19 (991) covid19 (22) covid19 (276)</td>
</tr>
<tr>
<td></td>
<td>ronaron (991) ronaron (58)</td>
</tr>
<tr>
<td></td>
<td>covid (156) getvaccinated (13) getvaccinated (38)</td>
</tr>
<tr>
<td></td>
<td>vaccine (1)91) vaccine (101) vaccine (47)</td>
</tr>
<tr>
<td></td>
<td>colts (258) vaccine (27) vaccineswork (44)</td>
</tr>
<tr>
<td>Norristown</td>
<td>covid19 (22) covid19 (276) covid19 (276)</td>
</tr>
<tr>
<td></td>
<td>ronaron (991) ronaron (58)</td>
</tr>
<tr>
<td></td>
<td>covid (156) getvaccinated (13) getvaccinated (38)</td>
</tr>
<tr>
<td></td>
<td>vaccine (1)91) vaccine (101) vaccine (47)</td>
</tr>
<tr>
<td></td>
<td>colts (258) vaccine (27) vaccineswork (44)</td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>covid19 (790) demvoice (18) ronaron (60)</td>
</tr>
<tr>
<td></td>
<td>covid19 (790) demvoice (18) ronaron (60)</td>
</tr>
<tr>
<td></td>
<td>resist (156) getvaccinated (13) getvaccinated (38)</td>
</tr>
<tr>
<td></td>
<td>vaccine (1)91) vaccine (101) vaccine (47)</td>
</tr>
<tr>
<td></td>
<td>colts (258) vaccine (27) vaccineswork (44)</td>
</tr>
<tr>
<td>Erie</td>
<td>covid19 (22) covid19 (276) covid19 (276)</td>
</tr>
<tr>
<td></td>
<td>ronaron (991) ronaron (58)</td>
</tr>
<tr>
<td></td>
<td>covid (156) getvaccinated (13) getvaccinated (38)</td>
</tr>
<tr>
<td></td>
<td>vaccine (1)91) vaccine (101) vaccine (47)</td>
</tr>
<tr>
<td></td>
<td>colts (258) vaccine (27) vaccineswork (44)</td>
</tr>
<tr>
<td>Allentown/Bethlehem</td>
<td>covid19 (276) getvaccinated (74) getvaccinated (74)</td>
</tr>
<tr>
<td></td>
<td>ronaron (60) wearamask (54)</td>
</tr>
<tr>
<td></td>
<td>covid19 (42)</td>
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<tr>
<td></td>
<td>getvaccinated (38)</td>
</tr>
<tr>
<td></td>
<td>covid19 (42)</td>
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<tr>
<td></td>
<td>getvaccinated (38)</td>
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<td></td>
<td>covid19 (42)</td>
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<tr>
<td>Other</td>
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<td>covid19 (42)</td>
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<td>getvaccinated (38)</td>
</tr>
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<td>covid19 (42)</td>
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<td>getvaccinated (38)</td>
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<td></td>
<td>covid19 (42)</td>
</tr>
<tr>
<td></td>
<td>getvaccinated (38)</td>
</tr>
<tr>
<td></td>
<td>covid19 (42)</td>
</tr>
</tbody>
</table>
## Top Influencers by County September 3– September 9

The top 5 influencers* for each region related to COVID19/vaccines are as follows:

<table>
<thead>
<tr>
<th>Allegheny</th>
<th>Butler</th>
<th>Cambria</th>
<th>Fayette</th>
<th>West Moreland</th>
<th>Beaver</th>
<th>Somerset</th>
</tr>
</thead>
<tbody>
<tr>
<td>BleacherReport</td>
<td>TheDanKingerski</td>
<td>ConemaughHealth</td>
<td>LaBelle50</td>
<td>MartyGriffinKD</td>
<td>colin_dunlap</td>
<td>DougLambert12</td>
</tr>
<tr>
<td>TheRightMelissa</td>
<td>msmd69</td>
<td>kristennmhudak</td>
<td>mommydog67</td>
<td>drkromanduri</td>
<td>TrishLoveHSSN</td>
<td>PFennn</td>
</tr>
<tr>
<td>DailyAthenaeum (agency)</td>
<td>ChrisCafardi</td>
<td>NicoleFuschino</td>
<td>gigi419 (antivax) (high bot score)</td>
<td>thissidanbell</td>
<td><em>ADAMN</em></td>
<td>Rosebud1668</td>
</tr>
<tr>
<td>KDKA (agency)</td>
<td>padenpur</td>
<td>krispykrunchr24</td>
<td>ToddiEury</td>
<td>ctsmith56</td>
<td>mal42190</td>
<td>_elizabethmckay</td>
</tr>
<tr>
<td>BR_CFB</td>
<td>keenzai</td>
<td>_ShaunDougherty</td>
<td>mattytc3</td>
<td>baileyweberr</td>
<td>wendish</td>
<td>freandliving</td>
</tr>
</tbody>
</table>

*influencers are defined as accounts with tweets often spread by others (ordered by out-degree centrality)

## Top Influencers by City September 3– September 9

The top 5 influencers* for each region related to COVID19/vaccines are as follows:

<table>
<thead>
<tr>
<th>Philadelphia</th>
<th>Chester</th>
<th>Norristown</th>
<th>Pittsburgh</th>
<th>Erie</th>
<th>Allentown/ Bethlehem</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>kdnerak33</td>
<td>FOX29philly</td>
<td>GovernorTomWolf</td>
<td>BleacherReport</td>
<td>ECDOH</td>
<td>ImWhiteWTF</td>
<td>tyfrench_</td>
</tr>
<tr>
<td>WhiteRabbitNN</td>
<td>RMConservative</td>
<td>RedHatPitbull2</td>
<td>TheRightMelissa</td>
<td>ACGatorSports</td>
<td>EricBoehlert</td>
<td>mmpadellan</td>
</tr>
<tr>
<td>PHLPublicHealth</td>
<td>drcraigwax</td>
<td>SeanHackman3</td>
<td>DailyAthenaeum</td>
<td>PrettyBoySm0t0th</td>
<td>JaquanBrisker</td>
<td>Jim_Jordan</td>
</tr>
<tr>
<td>kr3at</td>
<td>ThorDeplorable</td>
<td>UncleHotep</td>
<td>KDKA</td>
<td>GenMcLaneSports</td>
<td>MedsVet68</td>
<td>jcruchowbass</td>
</tr>
<tr>
<td>TheLaurenChen</td>
<td>TrumpPuppy9</td>
<td>GregBryk</td>
<td>BR_CFB</td>
<td>ETNreisenweber</td>
<td>BASDSUPT</td>
<td>favoritesenpai</td>
</tr>
</tbody>
</table>

*influencers are defined as accounts with tweets often spread by others (ordered by out-degree centrality)
Super Spreaders are users which generate content that is shared often, and facilitate the spread of information.

Super Friends are users that exhibit frequent two-way communication, facilitating large or strong communication networks.
Analysis of Tweeters - Other Influencers

- Other Influencers are users which have an active network presence, by tweeting often or mentioning users often, and operate in central parts of the conversation, such as by using important hashtags, or mentioning important users.

![Bar Chart]

Accounts Referenced by the Most Tweets

- This shows the tweeters that are most often referenced (e.g. mentioned) in PA tweets. Value is the number of tweets that reference the agent.

<table>
<thead>
<tr>
<th>Agent Label</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>favoritesenpaii</td>
<td>953</td>
</tr>
<tr>
<td>KITV4</td>
<td>553</td>
</tr>
<tr>
<td>GovernorTomWolf</td>
<td>551</td>
</tr>
<tr>
<td>YourFriendSamer</td>
<td>453</td>
</tr>
<tr>
<td>WISH-TV</td>
<td>440</td>
</tr>
<tr>
<td>Timcast</td>
<td>391</td>
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<tr>
<td>RWM-alone MD</td>
<td>378</td>
</tr>
<tr>
<td>CDC.gov</td>
<td>374</td>
</tr>
<tr>
<td>DrEricDing</td>
<td>357</td>
</tr>
<tr>
<td>CNN</td>
<td>347</td>
</tr>
</tbody>
</table>
General PA Conversation September 3– September 9

PA Hashtag Cloud September 3– September 9
Trending PA stories September 3– September 9

- **apnews.com** - AP source: Biden requiring federal workers to get COVID shot (229 Mentions)
- **mcsweeneys.net** - Oh My Fucking God, Get the Fucking Vaccine Already, You Fucking Fucks (177 Mentions)
- **thehill.com** - Howard Stern rips vaccine opponents: 'F--k their freedom, I want my (110 Mentions)
- **nbcnews.com** - Comedian Patton Oswalt cancels shows over Covid regulations (79 Mentions)
- **vaccines.gov** - Vaccines.gov - Find COVID-19 vaccine locations near you (66 Mentions)
- **tucker.vote** - TUCKER FOR U.S. SENATE (61 Mentions)

Trending PA tweets September 3– September 9

1. My 12 year old had appendicitis. The ER was overwhelmed with unvaccinated Covid patients and we had to wait 6+ hours. While waiting, his appendix ruptured and had to spend 5 days in hospital; just got his bill of $5000. So yeah, your decision to not vaccinate does affect others.

2. Occupied Democrats
   
   BREAKING: Florida doctor tells her "selfish" unvaccinated patients she’ll stop treating them in person because “the health of the public takes priority over the rights of individuals,” and “going against the science” will violate her “Hippocratic Oath.” RT IF YOU STAND WITH HER!

3. It can’t stop storing in disbelief at this map of current global covid hot spots — the U.S., the wealthiest country in the world, where vaccines are freely available, has the highest per capita case rate right now of any country except Mongolia.

4. It starts with “vaccine passports”...but what next? “Driving passports” to use my own car? "Library passports" to borrow a book? "TRAVEL PASSPORTS" to leave the country???? TYRANNY NEVER SLEEPS MY FRIENDS

5. Italy has passed their national vaccine mandate. No vaccine, no work, no school, no church, no shopping, no restaurants, no cafe, no sports center, no haircut, nothing, nada, or as we say in Italia niente! #ViolaLaGreenPass
Trending PA tweets September 3– September 9

6
Texas Republicans: "It's 'My body, my choice' for masks and vaccinations. But if you're a 13-year-old girl who was brutally raped by your uncle, then you're nothing more than a 'host body' who should be forced to give birth to your rapist's baby. Get it, y'all?"

9
President Biden: "Many of us are frustrated with the nearly 90 million Americans who are still not vaccinated, even though the vaccine is safe, effective, and free." AMEN.

10
This is simply not true. Vaccines for smallpox, later childhood vaccines for measles, mumps, rubella, HIB (vaccines discovered in USA), preserved our nation. I'm aghast at the absence of intellectual curiosity or even passing interest in American history from our US Congress.

1/11/2022

Top PA Twitter Authors September 3– September 9

<table>
<thead>
<tr>
<th>By mentions</th>
<th>By influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>@erin_vmd</td>
<td>@questlove</td>
</tr>
<tr>
<td>@helenjojojojo</td>
<td>@malcolmnanance</td>
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<tr>
<td>@kirkturner777</td>
<td>@6abc</td>
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<td>@tackingcaleuche</td>
<td>@fox29philly</td>
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<td>@liberalskiddin</td>
<td>@accuweather</td>
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<tr>
<td>@bob_levitt</td>
<td>@nbcphiladelphia</td>
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<td>@btifilma</td>
<td>@phillyinquirer</td>
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<td>@lthompsS4</td>
<td>@wpix</td>
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<tr>
<td>@cdekeane</td>
<td>@cbsphilly</td>
</tr>
<tr>
<td>@blyntjames</td>
<td>@gruber</td>
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</tbody>
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1/11/2022
Negative Attitudes September 3– September 9

![Graph showing total mentions of negative attitudes over time.]

Negative Hashtag Cloud September 3– September 9

![Image of negative hashtags related to vaccines, policies, health impacts, COVID-19, and health authorities.]

1/11/2022
Trending negative PA stories
September 3– September 9

- apnews.com - AP source: Biden requiring federal workers to get COVID shot (43 Mentions)
- childrenshealthdefense.org - Biden to Lay Out 6-Prong Plan for More COVID Vaccine Mandates and Restrictions Targeting Unvaccinated (20 Mentions)
- sharylattkisson.com - Covid-19 natural immunity compared to vaccine-induced immunity: The definitive summary (13 Mentions)
- medrxiv.org - Comparing SARS-CoV-2 natural immunity to vaccine-induced immunity: reinfections versus breakthrough infections (9 Mentions)
- yorkdispatch.com - 'I implore you': WellSpan doctor urges vaccine hesitant to get COVID shots (7 Mentions)
- dailycaller.com - CDC Doing 'Exploratory Work' To Decide Whether To Study If COVID Vaccines Are Causing 'Menstrual Irregularities' (6 Mentions)
- msn.com - Arkansas jail inmates say they were unknowingly given unproven COVID-19 treatment ivermectin: 'They were running experiments on us' (6 Mentions)

Trending Negative PA tweets
September 3– September 9

1. Texas Republicans: "It's 'My body, my choice' for masks and vaccinations. But if you're a 13-year-old girl who was brutally raped by your uncle, then you're nothing more than a 'host body' who should be forced to give birth to your rapist's baby. Got it, y'all?"

2. "My body my choice" "Round up the unvaccinated" - Same people

3. He doesn't have the power to mandate this. If government could mandate the vaccine for federal employees & contractors, it would require a vote of Congress. It's medical tyranny. People will remember those who did this to them & who did not speak out. https://t.co/W6g7mMAK25

4. If you forcibly promoted the vaccine while also saying "my body, my choice," your opinion on the Texas abortion law is irrelevant.

5. Recently on Fox News, Tucker Carlson has defended counterfeit vaccine cards, compared mask and vaccine mandates to "my body, my choice", and suggested those working to stop Covid should be "punished severely". Oh also, Peter Griffin can't say "goddamn."

* You may appear in this section if the comments on that post were expressing criticism of that post.
# Trending Negative PA tweets

**September 3– September 9**

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1. **Sharyl Attkisson**
   
   All who want to get vaccinated have the right to do so. But if we can still get new Covid afterward, vaccine mandates/passports don’t prove what’s safe—just who’s compiled. The safest, according to studies, are those who’ve recovered from Covid. Why is that so often ignored?

2. **Y’all wanna talk about “my body my choice” when it comes to the vaccine but take away women’s rights to get an abortion?? Sick**

3. **I’ll say this once again: @Facebook could end the anti-vax death cult in this nation tomorrow. It’s not hard. They know who the sources of this poison are, and could shut them down with a few clicks and save countless lives. But they won’t.**

4. **If you support a national vaccine mandate, but shout “my body, my choice!” in support of aborting a baby with its OWN AUTONOMOUSLY BEATING HEART ... you might be an evil asshole.**

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# Top PA Negative Twitter Authors

**September 3– September 9**

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<td>@jj_mei21</td>
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<tr>
<td>@mishao1989</td>
<td>@lindyli</td>
</tr>
<tr>
<td>@betsycurrie3</td>
<td>@amishpornstar1</td>
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*support for vaccines may appear in this section if the comments on that post were expressing criticism of that post.*
Trending Posts on Facebook September 3– September 9

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Trending Posts on Instagram September 3– September 9

Yesterday, I visited North Shore School District to thank teachers and school staff for their hard work, resilience, and strength during the COVID pandemic. We’re helping schools keep kids in classrooms with COVID-19 testing/vaccines. Increased funding for these resources, along with the continued help of our communities, can keep our students in school and COVID out. SECOND PHOTO: Dr. Nore Ortega, secretary of the Pennsylvania Department of Education, speaks about COVID prevention efforts in schools. See less

Trending Posts on Reddit September 3– September 9

1/11/2022 31

1/11/2022 32
General Trends September 3– September 9

- This week, overall trending stories covered new mandates and regulations such as President Biden requiring federal workers to get COVID shot, mask mandates at schools and universities as well as vaccination requirements;
- A lot of tweets express critique about the news that football player Carson Wentz is not vaccinated. Hashtags #colts and #wentz are in Twitter trends for PA this week;
- Hashtag #RonaRon is identified in trends, presents a great criticism against Ron Johnson, a Senator from Wisconsin, for his opposition to vaccination and COVID-19 prevention measures as well as using confidential information from covid briefing for insider trading;
- Mandates and Masks conversations are the most popular (trending hashtags #novaccinemandates; #novaccinepassports and others were identified in trends);
- A lot of negative tweets covered ‘My Body - My Choice’ concept that served as a tool for further polarization between people who are against ban on abortions and another group who are against vaccination requirements. These two sides have been clearly divided by the political ideology;
- Many posts discuss treatment with ivermectin;
- A lot of tweets express critique about the news that football player Carson Wentz is not vaccinated. Hashtags #colts and #wentz are in Twitter trends for PA this week;
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- Many posts discuss treatment with ivermectin;
- Facebook, Instagram, and Reddit messages also illustrated the overall concern about required vaccination and mask mandates, particularly for schools.

For More Information

- Director Kathleen M. Carley - kathleen.carley@cs.cmu.edu
  - http://www.casos.cs.cmu.edu/bios/carley/carley.html
- IDeaS website - https://www.cmu.edu/ideas-social-cybersecurity/
- CASOS website - http://www.casos.cs.cmu.edu/
- Facebook: @IDEasCMU
- Twitter: @IDEasSCMU
- YouTube: IDeaS Center
- Ask to be on our Email-Distro Lists