## PA Vaccine Conversations and Misinformation on Twitter

Dr. Matt Babcock, Dawn Robertson, Dr. Kathleen M. Carley Vaccine Hesitancy Project Update based on June 19-June25, 2021

The CMU centers for:

Informed DEmocracy And Social cyber-security

Computational Analysis of Social and Organizational Systems



Carnegie Mellon University

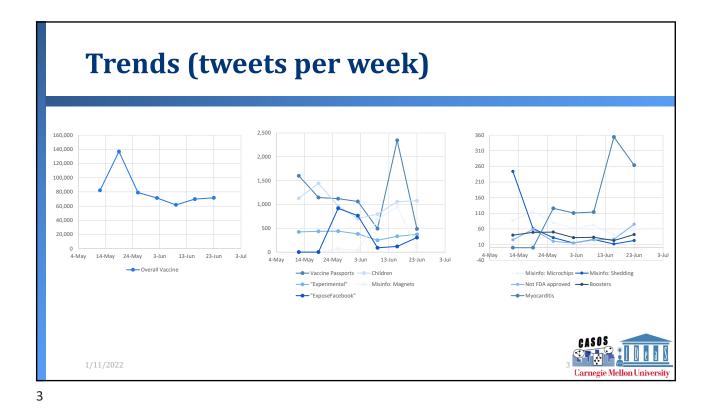


1

- □ 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.

1/11/2022





## **High Level View June 17-23, 2021**

Total PA Philadelphia Pittsburgh Overall Vaccine 71.700 35.950 50% 22.958 32% 615 1% 11.435 16% 742 55% 27 3% Not FDA approved 36% 16 38% 0% 17 30% 32 33% Misinfo: Magnets 1% 21 22% 4% 8 35% 1% 65 18% 1% 220 20% 0% 58 22% 0% 105 20% 11 48% 3 13% 193 52% 101 27% 611 57% 233 22% 136 52% 65 25% Misinfo: Shedding 370 1,076 264 522 Myocarditis 296 57% 109 21% 372 63% 113 19% 24 75% 5 16% 82 62% 22 17% Heart Masks Infertility Mandates 1% 87 15% 3% 2 6% 1% 26 20% 12 80% 1 7% 200 66% 61 20% 135 68% 41 21% 41 53% 18 23% 125 53% 67 28% 0% 2 13% 0% 42 14% 1% 20 10% 3% 17 22% 1% 39 17% Ingredients "ExposeFacebook" Natural Immunity Efficacy Spike Proteins 236 Delta Variant 450 56% 182 23%

- Added "Heart" to additionally capture discussion of vaccines causing heart issues
- Added "Delta Variant" mixed discussion related to the vaccine's effectiveness



1/11/2022

4

## **Top Hashtags June 17-23 (only if shares > 1)**

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

Philadelphia	Chester	Norristown	Pittsburgh	Erie	Allentown/ Bethlehem	Other
Covid19(712)	Covid19 (129)	Covid19(178)	Covid19(280)	Covid(21)	Covid19(227)	COVID(19)
DeltaVariant(196)	COVID(84)	DeltaVariant(75 )	DeltaVariant(89)	WeCanDoThis(7)	DeltaVariant(114)	GetVaccinated(7)
PhillyVaxSweeps(1 02)	SpikeProtein(52)	COVID(24)	COVID(52)	DeltaVariant (3)	COVID(42)	TrumpVirus(3)
Covid19ab(78)	DeltaVariant(45)	TheDefender (19) (RFK Jr. related)	COVIDVaccinatio n(45)	Cdnpoli (3) (Canadian politics re: vaccines)	Delta(24)	WearAMask(3)
GetVaccinated(73)	TheDefender(14 ) (RFK Jr. related)	WeCanDoThis( 12)	GetVaccinated(2 4)	COVID(2)	GetVaccinated(22)	Covid_19(3)

1/11/2022

Carnegie Mellon University

5

## Top URLs - June 17-23 (only if shares > 1)

Philadelphia	Chester	Norristown	Pittsburgh	Erie	Allentown/ Bethlehem	Other
https://thehighwire.com/ videos/pfizer-up-the- thing-to-be-terrified-of-is- your-government/ (119)	https://www.zerohedge.c om/covid-19/giant- mistake-cd-celays- emergency-meeting-post- yax-heart-inflammation- due-juneteenth (41)	https://uncutnews.ch/der-ehemalige-up-von-pfizer-mike-weadon-warnt-programmierte-spike-proteine-erzeugen-blutgerinnsel-video/ (31)	https://www.thegatewaypundit.com/2021/06/kamala-harriy-tells- activists-knock-doors-harass-people- havent-vaccinated-desperate-push- meet-4th-july-goal- video/?utm-source=Twitter&utm_m edium=PostTopSharingButtons&utm_ campaign=websitesharingbuttons (301)	https://www.wkbw.com/sp orts/buffalo-bills/poloncarz- erie-county-to-rescind- vaccine-requirement-for- buffalo-bills-games-stadium- events (19)	https://www.cvs.com/immun izations/covid-19-vaccine (4444)	https://www.phila.gov/2 021-06-17-city-provides- update-on-covid-19-for- thursday-june-17-2021/ (2)
https://www.who.int/em ergencies/diseases/novel- coronavirus-2019/covid- 19-vaccines/advice (107)	https://www.cvs.com/im munizations/covid-19- vaccine (35)	https://www.waigreens.c om/findcare/vaccination/ covid-19 (28)	https://www.espn.com/nfl/story/_fi d/31660735/buffalo-bills-wr-cole- beasley-addresses-vaccination- concerns-nfipa (69)	http://erie.gov/vax (9)	https://www.thegatewaypun dit.com/2021/06/kamala- harris-tells-activists-knock- doors-harss-people-havent- vaccinated-desperate-push- meet-4th-july-goal- video/?utm_source=Twitter& utm_medium=PostTopSharin gButtons&utm_campaign=we bsitesharingbuttons (38)	https://www.elmwoodp arkzoo.org/event/covid- 19-vaccine-clinic/2021- 06-21/ (2)
https://nypost.com/2021/ 06/18/unvaccinated-west- point-cadets-getting- bullied-and-punished- families- say/?utm medium=Social Flow&utm_source=NYPT witter&utm_campaign=So cialFlow (91)	https://www.who.int/em ergencies/diseases/novel- coronavirus-2019/covid- 19-vaccines/advice (19)	https://drive.google.com/ drive/folders/1fu9X M3m oC1fVkiiNUxeQqms4fiFPf 3A (28) (this is a google drive link to anti-vaccine passport bill information)	https://www.who.int/emergencies/d iseases/novel-coronavirus- 2019/covid-19-vaccines/advice (52)	http://vaccines.gov (4)	https://www.who.int/emerge ncies/diseases/novel- coronavims-2019/covid-19- vaccines/advice (37)	https://www.foxnews.co m/sports/bills-beasley- nfl-covid-retire- vaccinated (2)
https://www.redvoiceme	https://childrenshealthdef	https://childrenshealthdef	https://www.theblaze.com/news/bu	https://gen.medium.com/th	https://childrenshealthdefens	https://amp.usatoday.co