## PA Vaccine Conversations and Misinformation on Twitter

Iuliia Alieva, Dr. Matt Babcock, Dawn Robertson, Dr. Kathleen M. Carley Vaccine Hesitancy Project Update based on June 24 - June 30, 2021

The CMU centers for:

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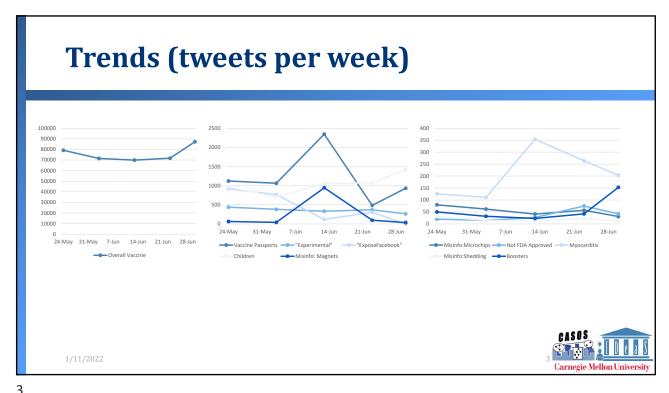


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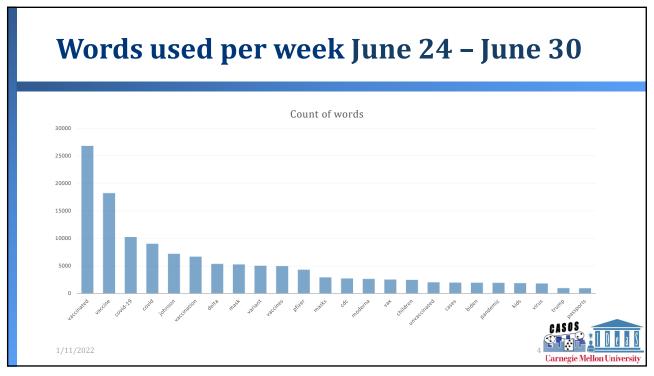
- □ This report is an effort to summarize social media conversations around COVID-19 issues in Pennsylvania, focusing on vaccination. It contains an analysis of the general topics about the current pandemic, such as COVID-19 regulations, mandates, masks, pro-and anti-vaccination campaigns, as well as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

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## High Level View June 24 - June 30

	Total PA	Philad	elphia	Pittsb	urgh	Erie	9	Allento	wn/Bethlehem	C	ther
Conversation	Tweets	Tweets	%	Tweets	%	Tweets	%	Tweets	%	Tweets	%
Overall Vaccine	87210	41163	47.2	20320	23.3	698	8.0	16832	19.3	8172	9.4
Vaccine Passports	931	592	63.6	210	22.6	3	0.3	124	13.3	2	0.2
Not FDA											
Approved	42	22	52.4	11	26.2			9	21.4		
Boosters	153	83	54.2	46	30.1	4	2.6	19	12.4	1	0.7
Misinfo: Microchips	31	25	80.6	4	12.9			2	6.5		
Misinfo: Magnets	36	23	63.9	5	13.9			7	19.4	1	2.8
Misinfo: Shedding	12	8	66.7	2	16.7			2	16.7		
"Experimental"	263	158	60.1	62	23.6	2	8.0	38	14.4	3	1.1
Children	1412	817	57.9	323	22.9	7	0.5	196	13.9	69	4.9
Myocarditis	204	110	53.9	38	18.6	2	1.0	51	25.0	3	1.5
Heart	811	348	42.9	172	21.2	10	1.2	207	25.5	74	9.1
Masks	1853	1237	66.8	345	18.6	14	8.0	239	12.9	18	1.0
Infertility	13	8	61.5	2	15.4	1	7.7	2	15.4		
Mandates	1272	688	54.1	412	32.4	16	1.3	151	11.9	5	0.4
Natural Immunity	144	92	63.9	35	24.3			16	11.1	1	0.7
Efficacy	48	24	50.0	7	14.6			17	35.4		
Spike Proteins	72	48	66.7	13	18.1	1	1.4	10	13.9		
Delta Variant	2634	1684	63.9	464	17.6	35	1.3	425	16.1	26	1.0
cytotoxic	4	1	25.0	2	50.0			1	25.0		

- Added "cytotoxic" to the conversations
- Dropped "ingredients" and "ExposeFacebook" as those waned



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## **Top Hashtags June 24 – June 30**

☐ 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 (780)	COVID19 (183)	COVID19 (233)	COVID19(475)	COVID19(23)	Covid19(315)	COVID19(16)
DeltaVariant (396)	DeltaVariant (77)	DeltaVariant(1 06)	DeltaVariant(22 6)	DeltaVariant (8)	DeltaVariant(147 )	DeltaVariant (12)
VaxUpPhilly (175)	CovidVaccine (20)	ProVaxx (44)	CovidVaccine (94)	CovidVaccine (3)	CovidVaccine (33)	antivaxxers(4)
CovidVaccine (114)	Delta(18)	CovidVaccine (22)	modernavaccin e (57)	Pfizer(2)	Delta (16)	antivax(1)
PhillyVaxSweeps (113)	modernavacci ne (13)	Pfizer (17)	VaccinePassport s(37)	Delta (1)	Pfizer(13)	Delta(1)

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Top URLs - June 24 – June 30							
Philadelphia	Philadelphia Chester		Pittsburgh	Erie	Allentown/ Bethlehem	Other	
https://americasfrontlinedoctors .org/frontlinenews/former- pfizer-vp-answers-reuters-fact- checker-a-pack-of-lies/ Former Pfizer VP answers Reuters 'fact checker': 'A pack of lies' (379)	https://www.cnbc.com/2021/06/25/delta-who-urges-fully- vaccinated-people-to-continue- to-wear-masks-as-variant- spreads.html WHO urges fully vaccinated people to continue to wear masks as delta Covid variant spreads (29)	https://childrenshealthdefense. org/defender/man-dies- moderna-vaccine-rare-blood- dotting-disorder/ Man Dies After Second Moderna Dose Following Rare Blood Clotting Disorder Linked to the Vaccine, Doctors Say (168)	https://www.cnbc.com/2021/06/25/delta- who-urges-fully-vaccinated-people-to- continue-to-wear-masks-a-variant- spreads.html WHO urges fully vaccinated people to continue to wear masks as delta Covid variant spreads (157)	https://www.chbc.com/2021/06/2 5/delta-who-urges-fully- vaccinated-people-to-continue-to- wear-masks-as-variant- spreads.html WHO urges fully vaccinated people to continue to wear masks as delta Covid variant spreads (file)	https://www.cvs.com/immunizations /covid-19-vaccine CVS page (4607)	https://www.cnbc.com/2021/f 6/25/delta-who-urges-fully- vaccinated-people-to- continue-to-wear-mask-as- variant-soreads.html WHO urges fully vaccinated people to continue to wear masks as delta Covid variant spreads (6)	
https://www.cnbc.com/2021/06 /25/delta-who-urges-fully- vaccinated-people-to-continue- to-wear-masks-as-variant- spreads.html WHO urges fully vaccinated people to continue to wear masks as delta Covid variant spreads (302)	https://res.mdpi.com/d_attach ment/vaccines/vaccines-09- 00693/article_deploy/vaccines- 09-00693-v2.pdf The Safety of COVID-19 Vaccinations—We Should Rethink the Policy (pdf article) (28)	https://www.pennlive.com/new s/2021/06/pennyvania-house- passes-bill-prohibiting-vaccine- requirements-at-colleges-public- facilities-on-party-line-vote.html Pa. House passes bill prohibiting COVID-19 vaccine requirements at colleges, public facilities (122)	https://childrenshealthdefense.orp/defender/ man-dis-moderna-vaccine-rare-blood- clotting-disorder/ Man Dies After Second Moderna Dose Following Rare Blood Clotting Disorder Linked to the Vaccine, Doctors Say (117)	https://update.gannon.edu/Updat e/Detail/119 MASK MANDATE LIFTED AT GANNON UNIVERSITY (4)	https://www.cnbc.com/2021/06/25/ delta-who-urges-fully-vaccinated- people-to-continue-to-wear-masks- as-variant-spreads.html WHO urges fully vaccinated people to continue to wear masks as delta Covid variant spreads (72)	https://www.nytimes.com/20/ 1/06/28/health/coronavirus- yaccines-immunity.html Pfizer and Moderna Vaccines likely to Produce Lasting Immunity, Study Finds (4)	
ttos://babylonbee.com/news/bide says-latinx-arent-getting- cocinated-because-their-giant- per programme siden Says Latinx ren't Getting Vaccinated Because neir Giant Sombreros Make It npossible To Enter Pharmacies 13	https://www.timesofisrael.com/i srael-to-reinstate-indoor-mask- mandate-next-week-as-covid- 19-cases-keep-rising/ Israel to reinstate indoor mask mandate next week as COVID-19 cases keep rising (17)	https://justthenews.com/nation /states/pennsylvanias-vaccine- passport-ban-clears-state-house Pennsylvania lawmakers vote to ban vaccine passports (78)	https://www.dailymail.co.uk/health/article- 9734317/Doctors-report-known-case-rare- blood-clost-patient-received-Moderna-COVID- vascine-html Doctors report first known case of rare blood olds in US patient who received the Moderna COVID-19 vaccine - and later died (91)	https://www.logically.ai/articles/fu turez-anti-vaccines schoolchildren7hs preview-ejOixkl A-49684475002/ EXCLUSIVE: Inside Future Z, The Anti-Vax Campaign Targeting Schoolkids (3)	https://www.vaccines.gov/ (34)	https://apnews.com/article/co ronavirus-pandemic-health- 941fcf43d9731c76c16e7354f5 5e187 Nearly all COVID deaths in US are now among unvaccinated (3)	
https://www.latimes.com/califor nia/story/2021-06-24/covid-19- delta-avaints-proad-california- how-bad-is-if Delta variant is spreading in California as COVID- 19 battle enters an uncertain phase (167)	https://www.theburningplatfor m.com/2021/06/28/cdc-fda- prepare-mass-distribution-of-a- merck-sanoft-six-in-one-vaccine- for-kids-turning-blind-eye-to- safety-signals/ CDC, FDA Prepare Mass Distribution of a Merck/Sanoft Six-in-One-Vaccine for Kids, Turning Blind Eye to Safety (16)	https://www.cnbc.com/2021/06/ /25/delta-who-grast-fully- vaccinated-people-to-centifue- to-war-masks-as-variants- greads.html WHO urges fully vaccinated people to continue to wear masks as delta Covid variant spreads (46)	https://www.oann.com/gop-backed-bill-to- ban-vaccine_eassports-map-basses-both- senter-and-house-but-face-wet-form dem- gov/ GOP-Backed Bill To Ban Vaccine Passports in Passes Both Senate And House, But Faces Veto From Dem Gov. (76)	https://www.usatodav.com/story/ news/health/2021/06/22/houston- methodish-hospital-covid-19- yaccine-requirements- worker/53/14/2000/J More than 150 Houston hospital workers are fred or resigned over COVID-19 vaccine requirement (2)	https://www.media.pa.gov/Pages/H auth-Details.asov/reosale-1.505 Department Of Health Uffing Universal Masking Order On June 28, Ugring Pennsylvaniars To Follow Mask-Wearing Guidance Where Required (27)	https://profootballtalk.nbcspor ts.com/2021/06/24/non- vaccinated-blevers-who-eet- covid-could-end-up-not-being- paid/. Non-vaccinated players who get COVID could end up- not being paid (3)	
https://rumble.com/viaz6n-ex- pfizer-uv-eadon-warns- children-50-times-more-likely- to-die-from-vaccine html Ex- Pfizer VP Veadon Warns: Children 50 Times More Likely to Die From Vaccine Than Virus (160)	https://undark.org/2021/06/24/ climate-emergency-calls-for- new-approach-to-mental- health/ Opinion: The Climate Emergency Calls for a New Approach to Mental Health (15)	https://apnews.com/article/coro navirus-pandemic-health- 941fcf349731c76c16e7354f5ds e157 Nearty all COVID deaths in US are now among unvaccinated (31)	https://www.theepochtimes.com/man-dies- after-rare-blood-clot-disorder-received- moderna-code-19-waccine; resport_3836991.htm?/urt medium-socialitu- resport_3836991.htm?/urt medium-socialitu- tu-socialitus/surt-campain-diptalisus/ Man Dies After Rare Blood Clot Disorder, Received Moderna COVID-19 Vaccine: Report (51)	https://www.nytimes.com/live/202 1/06/28/world/covid-vaccine- coronavirus-mask/a-study-finds- that-the-pfizer-and-moderna- vaccines-could-offer-protection- for-years W.H.O. Urges Masking for the Vaccinated, in Split With C.D.C. (2)	https://apnews.com/article/coronavi rus-pandemic-health- 941fcf43d9731c76c16e7354f5d5e187 Nearly all COVID deaths in US are now among unvaccinated (26)	https://www.cnn.com/2021/0 /23/us/houston-methodist- fired-employee/index.html Houston hospital employee who says she was fired for not getting vaccine: 'Don't take away my choice' (3)	