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Introduction

Low uptake of COVID-19 booster vaccines (26%) compared to 68% receiving primary series is a persistent public health issue.

Predictors of COVID vaccine uptake are evolving.

The purpose of this study is to identify demographic characteristics associated with booster uptake.

Methods

Survey: 19-items containing demographics and COVID vaccine perceptions

Time frame: December 7, 2021 - October 31, 2022

Locations: St. Louis area, Lake of the Ozarks and Southwest Missouri

Data collection sites: Health centers, public/community places, neighborhood canvassing, community events, phone outreach, other

Percent of surveys collected at location types - by site

Location type	MU (n = 521) %	WU-STL (n = 623) %	Both (n = 1144) %
Health centers	79	16	48
Public/community places	4	41	23
Neighborhood canvassing	0	31	16
Community events	15	3	9
Phone outreach	0	8	4
Other	2	2	2

36 surveys were excluded from analysis due to missing variables.

Analytic plan:

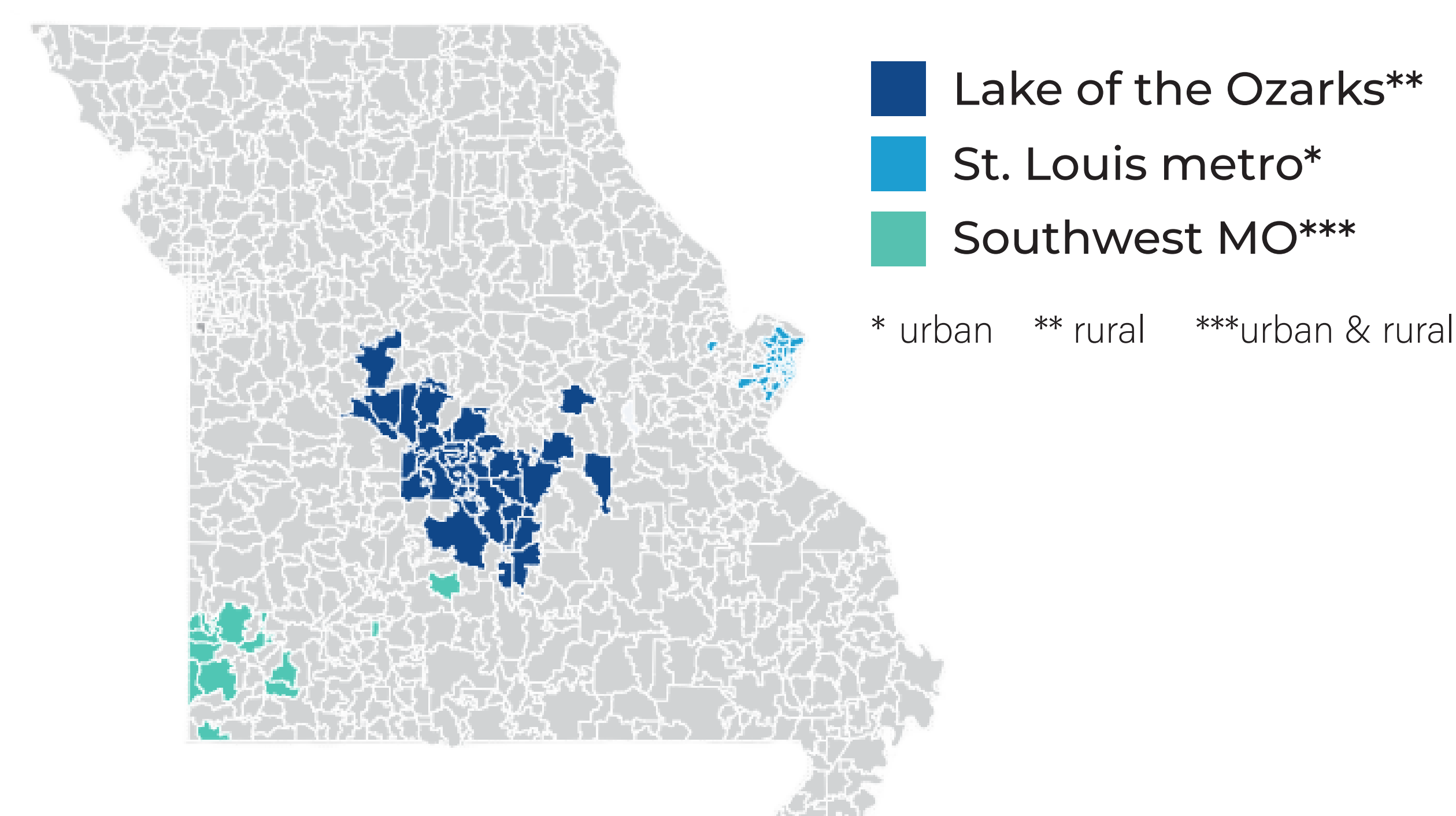
Descriptive analysis of participant characteristics

Logistic regression models: dependent variable (primary series or unvaccinated; boosted or primary series only)

Covariates: age, gender, race/ethnicity and most trusted source for vaccine information. P-value ≤.05 for significance.

Results

Survey respondent locations of resident - by ZIP



Sample characteristics (n = 1108)

	Vaccinated only (n=302) %	Vaccinated + boosted (n = 536) %	Unvaccinated (n=270) %
Gender			
Female	64	62	60
Male	35	37	39
Trans/non-binary	1	1	1
Race/Ethnicity *			
Black	50	63	18
Hispanic/Latino	2	1	4
White	43	34	72
Other	5	3	6
Age (in years)*			
18-29	32	9	30
30-39	20	15	23
40-49	18	19	18
50-59	12	21	15
60-69	12	24	8
70+	5	12	6
Urban-Rural (RUCA Codes)*			
Urban	67	85	39
Large rural	18	6	40
Small rural	5	3	4
Isolated	11	7	17
Trusted sources for vaccine information*			
Doctor/healthcare provider	57	78	48
CDC/government agencies	4	7	3
Family member(s)	17	4	13
Co-workers	<1	1	2
Scientists and researchers	1	1	<1
Nobody (only trust myself)	5	1	8
News media	1	<1	1
Religious leaders	2	<1	4
Friend(s)	0	<1	4

*p < 0.0001

Results (cont.)

Residents of large rural areas were 84% less likely to get a booster dose; 67% for those living in small rural towns; 71% for those living in isolated rural community compared to urbanites.

Predictors of getting a booster were age (older), Black, urbanites and female respondents.

Getting a booster was significantly associated with doctor/healthcare provider as most trusted source. of vaccine information.

13% of Black respondents in metro St. Louis area reported trusting family members for vaccine information, 2nd only to doctors compared to 5% of White St Louisans which was 3rd behind doctors and CDC.

Trust of the CDC, FDA and other government agencies varied significantly between whites in St. Louis (33%) and Lake of the Ozarks/Southwest (6%).

Only 8 respondents listed news media as their most trusted source of vaccine information.

Discussion & Conclusion

Where you live matters in adoption of boosters, with rural residents much less likely to adhere to recommendations.

Communications strategies in urban areas should acknowledge the importance of family members' influence on uptake of vaccination and boosters.

Regardless of where you live, doctors are highly valued as a trusted source of vaccination advice.

Encouraging healthcare providers to advocate for and champion timely vaccinations may be critical for increasing vaccination rates.