State	(School) Year Available	Spatial Scale	Vaccination Type Provided	Age group	Notes	Source or Link	Date Accessed
Alabama	2019-2023	County	4+ DTaP, 3+ Polio, 2 Measles, 1 Mumps, 1	Kindergarten		Alabama Department of Public Health (ADPH)	9/7/2023
Alaska		, ,	Rubella, 1 VAR		County-level MMR data unavailable; state excluded from study	https://www.alabamapublichealth.gov/	
	2017.0000		0.1440	16 1	County tevet Pirit data unavaitable, state excluded from study	Arizona Department of Health Services:	0/04/0000
Arizona	2017-2023	County	2+ MMR	Kindergarten		https://apps.azdhs.gov/IDRREportStats	8/24/2023
Arkansas					County-level MMR data unavailable; state excluded from study	California Department of Public Health:	
			2+ MMR	Kindergarten		https://www.cdph.ca.gov/Programs/CID/DCDC/C	
California	2017-2022	County				DPH%20Document%20Library/Immunization/202	8/24/202
						1-22KindergartenSummarvReport.pdf	
	2017-2023	County	2+ MMR	Kindergarten		Colorado Department of Public Health and	0/04/0000
Colorado						Environment: https://cdphe.colorado.gov/school-	8/24/2023
			+			and-child-care-immunization-data Connecticut Department of Public Health:	
Connecticut	2017-2023	County	2+ MMR	Kindergarten		https://data.ct.gov/Health-and-Human-	8/24/202
Connecticut	2017-2023					Services/County-Immunizations-and-Exemption-	
District of Columbia					Pre-pandemic data unavailable; state excluded from analysis.	Rates-by-School/8kid-pp5k/data	
Delaware					County-level MMR data unavailable; state excluded from study		
			5+ DTaP, 4+ IPV, 2+ MMR, 3+ HepB, 2+ VAR	Kindergarten		Florida Department of Health:	8/24/2023
Florida	2017-2022	County				https://www.floridahealth.gov/programs-and-	
		,				services/immunization/resources/surveys/_docum	
						ents/k-7-status2021-22.ndf Georgia Department of Public Health:	
Georgia	2019-2023	County	4:3:1:3:3:1:4 series	19-35 months	Georgia reports 1-dose MMR data, and is therefore excluded from	https://dph.georgia.gov/immunization-study-	8/24/2023
					the study	reports	
Hawaii	2017-2020, 2021-2023	County	5 DTaP, 4 Polio, 2 HepA, 3 HepB, 2 MMR, 2 VAR	K-12	Only incomplete immunization rates provided, so MMR rates were	State of Hawaii, Department of Health:	8/24/2023
Hawaii					calculated as 1 - incomplete rates.	https://health.hawaii.gov/docd/resources/reports/immunization-exemptions/	6/24/2023
Idaho					County-level MMR data unavailable; state excluded from study		
	2017-2023	County	1+ MMR	PreK-12	Illinois reports 1-dose MMR rates. Therefore, state was excluded from study	Illinois Department of Public Health:	9/19/2023
Illinaia						https://dph.illinois.gov/topics-services/prevention-	
Illinois						wellness/immunization/coverage- dashboards/school-vaccination-coverage-	
						dashboard html	
	2019-2024	County	7 Series Immunization (4+ DTaP, 3+ IPV, 1+ MMR, 3+ Hib, 3+ HepB, 1+ VAR, 4+ PCV)	19-35 months	Indiana reports 1-dose MMR rates. Therefore, state was excluded from study	Indiana Department of Health:	5/21/2024
Indiana						https://www.in.gov/health/immunization/immuniza	
						tion-data/county-rate-	
						assessment/#Annual Reports Iowa Health & Human Services:	
lowa	2018-2019, 2020-2024	County	2 MMR	Adolescent		https://tracking.idph.iowa.gov/Health/Immunizatio	5/21/2024
1000						n/Adolescent-Immunizations/Adolescent-	
						Immunizations-Data Kansas Department of Health and Environment:	
Kansas	2019-2020, 2022-2023	School	2 MMR	Kindergarten	MMR rates provided at the school level. School-level data	https://www.kdhe.ks.gov/2016/Kindergarten-	9/17/2023
					aggregated to county level.	Immunization-Data	
	2017 2000		0.1440			Kentucky Environmental Public Health Tracking:	0/4//0000
Kentucky	2017-2023	County	2+ MMR	Kindergarten		https://healthtracking.ky.gov/Topics/immunizations	9/14/2023
Louisiana		County	4 DTaP, 3 Polio, 3 HepB, 2 MMR, 2 VAR, 1 Tdap, 1 MenACWY	Kindergarten	The data reflects public school 2-dose MMR rates	/Pages/childhood-immunizations.aspx Louisiana Department of Health:	
						https://analytics.la.gov/t/LDH/views/School_SY/C	9/17/2023
	2018-2019, 2020-2022					ompleteImmunizaionRecords?%3Adisplay_count=	
						n&%3Aembed=y&%3AisGuestRedirectFromVizport	
						al=y&%3Aorigin=viz_share_link&%3AshowAppBan	
						ner=false&%3Ashow\/izHome=n Maine Center for Disease Control and Prevention:	
Maine	2018-2024	County	2+ MMR	Kindergarten		https://www.maine.gov/dhhs/mecdc/infectious-	5/20/2024
	1					disease/immunization/publications/index.shtml	

Pennsylvania	2010-2020	County	2 - 10001	Mindelgaiteil		0Survey%20Summary%20by%20County%20201-	// 1/2023
Donnoulumio	2016-2023	County	2+ MMR	Kindergarten		zations PA.gov: https://www.health.pa.gov/topics/Documents/Pro grams/Immunizations/School%20Immunization%2	
Oregon	2016-2024	County	2 Measles	Kindergarten		Oregon Immunization Program: https://public.tableau.com/app/profile/oregon.imm unization.program/viz/SchoolLawTableau/Kimmuni zations	5/23/2024
Oklahoma	2017-2022	County	5 DTaP, 4 Polio, 2 HepA, 3 HepB, 2 MMR, 1 VAR	Kindergarten		Oklahoma State Department of Health: https://oklahoma.gov/content/dam/ok/en/health/h ealth2/aem-documents/prevention-and- preparedness/immunizations/kindergarten- survey/KSurvey_OSDH_InfographicSummary_20- 21.pdf	7/1/2023
Ohio					County-level MMR data unavailable; state excluded from study		
North Dakota	2018-2019, 2021-2024	County	5 DTaP, 4 Polio, 3 HepB, 2 MMR, 2 VAR	Kindergarten		https://www.ncdhhs.gov/ North Dakota Health & Human Services: https://app.powerbigov.us/view?r=eyJrljoiZTA1NjM zYzYtMjk4NS00MDg3LTtiNGltNWQwNzdkZTRlN2Fi liwidCl6ljJkZWEwNDY0LWRhNTEtNGE4OC1iYWU vl WJz7GISNG1iMGM1NCJ9	5/18/2024
North Carolina	2019-2020, 2022-2023	County	2+ MMR	Kindergarten		NC Department of Health and Human Services: https://www.ncdhhs.gov/	8/18/2023
New York	2017-2023	School	2+ MMR	Kindergarten	County rates generated from school rates and public enrollment data. Public enrollment data available here: https://www.p12.nysed.gov/irs/statistics/enroll-n-staff/ArchiveEnrollmentData.html	https://health.data.ny.gov/Health/School- Immunization-Survey-Beginning-2012-13- Schoo/5pme-xbs5	9/14/2023
New Mexico	2018-2019, 2022-2023	County	4+ DTaP, 4 Polio, 2 HepA, 3 HepB, 2 MMR, 2 VAR	Kindergarten		New Mexico Health: https://www.nmhealth.org/data/view/report/2664/	7/1/2023
New Jersey	2017-2023	County	4+ DTaP, 3+ Polio, 3 HepB, 2 MMR, 1 VAR	Kindergarten		New Jersey Department of Health: https://www.nj.gov/health/cd/documents/status_r eport/2023/all_schools_vac.pdf	7/1/2023
New Hampshire					County-level MMR data unavailable; state excluded from study		
Nebraska Nevada					County-level MMR data unavailable; state excluded from study County-level MMR data unavailable; state excluded from study		
Montana					from study		
		,			Ppost-pandemic vaccination data is unavailable; state excluded	https://health.mo.gov/	
Missouri	2018-2019, 2022-2023	County	2+ MMR	Kindergarten		https://msdh.ms.gov/ Missouri Department of Health and Senior Services:	8/24/2023
Mississippi	2018-2019, 2022-2023	County	4+ DTaP, 3+ Polio, 3 Hep, 2 MMR, 2 VAR	Kindergarten		stats/school/index.html Mississippi State Department of Health:	9/13/2023
Minnesota	2017-2024	County	2+ MMR	Kindergarten		statistics/schoolimmsdata Minnesota Department of Health: https://www.health.state.mn.us/people/immunize/	5/16/2024
Michigan	2018-2019, 2022-2023	School	7 Series Immunization (4+ DTaP, 3+ IPV, 1+ MMR, 3+ Hib, 3+ HepB, 1+ VAR, 4+ PCV)	Kindergarten		https://www.michigan.gov/mdhhs/adult-child- serv/childrenfamilies/immunizations/data-	9/12/2023
Massachusetts	2017-2024	County	2+ MMR	Kindergarten		Massachusetts Health & Social Services: https://www.mass.gov/info-details/school- immunizations#kindergarten-data-	5/18/2024
Maryland	2017-2023	County	2+ MMR	Kindergarten		Maryland Department of Health: https://www.maine.gov/dhhs/mecdc/infectious- disease/immunization/publications/index.shtml	8/24/2023

Rhode Island	2018-2019, 2020-2024	City	5 DTaP, 4 Polio, 3 HepB, 2 MMR, 2 VAR	Kindergarten	weighted by city population in 2020. Population data available from here: https://planning.ri.gov/sites/g/files/xkgbur826/files/documents/ce nsus/2021/POP-BY-C%26T-20102020.pdf. Dataset Notes: West Greenwich and West Kingston are not included due to missing data. New Shoreham (2023-24) data is missing and adopts 2022-23 data. Warren (2020-21) data is missing and adopts 2021-	Rhode Island Department of Health: https://ricair- data-rihealth.hub.arcgis.com/	5/23/2024
South Carolina	2019-2024	County	4+ DTaP, 3 Polio, 2 HepA, 3 HepB, 2 MMR, 2 VAR	K-12	on data	South Carolina Department of Public Health: https://scdhec.gov/health/vaccinations/childcare-school-vaccine-requirements/school-vaccination-coverage-exemption-data-county-2016-2020	3/21/2024
South Dakota	2017-2024	County	2+ MMR	Kindergarten		South Dakota Department of Health: https://doh.sd.gov/media/4qeanw0b/sd_school_va ccination_rates_2021-2022.pdf	4/1/2024
Tennessee	2018-2023	County	DTaP, Polio, 2 HepA, HepB, 2 MMR, 2 VAR	Kindergarten		Tennessee Department of Health: https://data.tn.gov/t/Public/views/SchoolCoverage RateDashboard/SchoolStory?%3AshowAppBanner =false&%3Adisplay_count=n&%3AshowVizHome= n&%3Aorigin=viz_share_link&%3Aembed=yes&%3 Arender=false&%3Atoolbar=no&%3Atabs=no	7/22/2023
Texas	2019-2023	County	2+ MMR	Kindergarten		Texas Health and Human Services: https://www.dshs.texas.gov/immunization-unit/immunization-coverage-levels/vaccination-	7/3/2023
Utah	2017-2024	County	2+ MMR	K-12		coverage-levels-rexas Utah Department of Health & Human Services: https://immunize.utah.gov/wp- content/uploads/2022-Immunization-Coverage- Report_FINAL_pdf	5/22/2024
Vermont	2017-2023	County	2+ MMR	Kindergarten		Vermont Department of Health: https://www.healthvermont.gov/stats/surveillance-reporting-topic/vaccination-coverage	9/11/2023
Virginia	2017-2023	County	4+ DTaP, 4 Polio, 2 HepA, 3 HepB, 2+ MMR, 2 VAR	Kindergarten		Virginia Department of Health: https://www.vdh.virginia.gov/immunization/sis-	7/7/2023
Washington	2018-2023	County	2+ MMR	Kindergarten		reports-2021-present/ Washington State Department of Health: https://doh.wa.gov/data-and-statistical- reports/washington-tracking-network-wtn/school- immunization/dashboard	7/7/2023
West Virginia					County-level MMR data unavailable; state excluded from study		
Wisconsin	2018-2019, 2022-2024	County	2+ MMR	K-12		Wisconsin Department of Health Services: https://www.dhs.wisconsin.gov/publications/p024 20b.pdf	5/15/2024
Wyoming	2018-2022	County	2+ MMR	7-years-old		Wyoming Department of Health: https://health.wyo.gov/publichealth/immunization/ immunization-data/wyoming-county-report-cards/	7/8/2023