Understanding Vaccines

- National + State approval processes and monitoring systems
- Kansas Immunization Poll: National example to protect state vaccine requirements

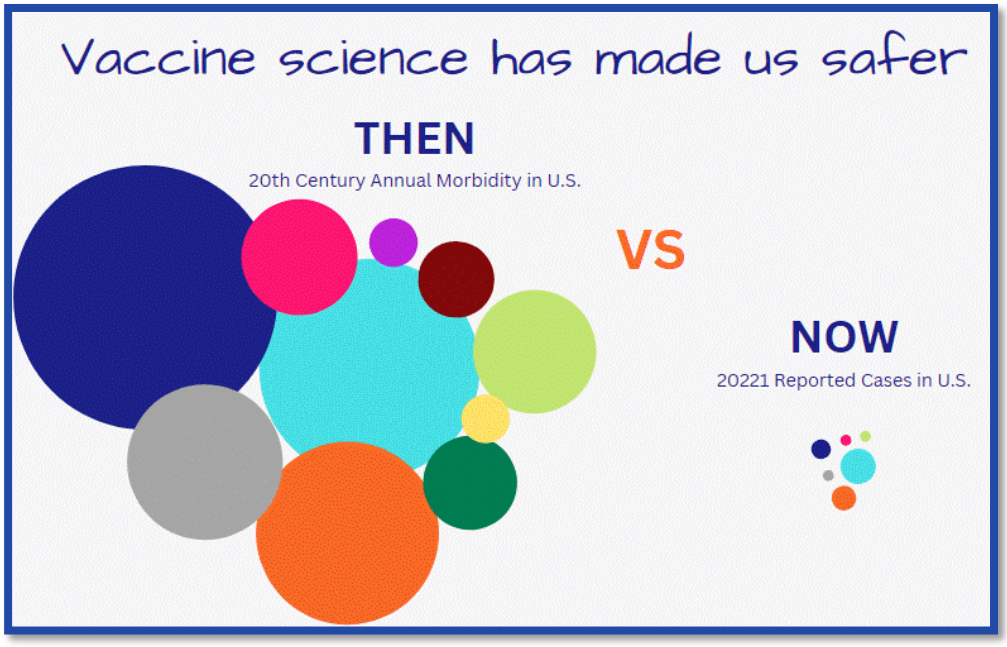
Published in 2023 by the Mid America Immunization Coalition (MAIC), program of Nurture KC.

TABLE OF CONTENTS

UNDERSTANDING VACCINES

The creation of safe and effective vaccines has been a pillar of public health for decades. This report highlights the processes and procedures in place at a national and state level, ensuring a balance of evidence-based testing along with public input and recourse. At a time when disinformation may discourage vaccine uptake, it is important to revisit the checks and balances of our rigorous vaccine research, administration and monitoring protocols that have worked for decades.

Every state in the country mandates vaccines for school-aged children as the best defense in preventing contagious disease. While every state has a process for obtaining a medical exemption and 44 states have a process for religious exemption, high compliance is a hallmark of the progress that has been made throughout the years. The result of this universal application is apparent in the graphic and chart below showing disease occurrence before and after vaccines.



U.S. 20th Century Annual Morbidity vs 2021

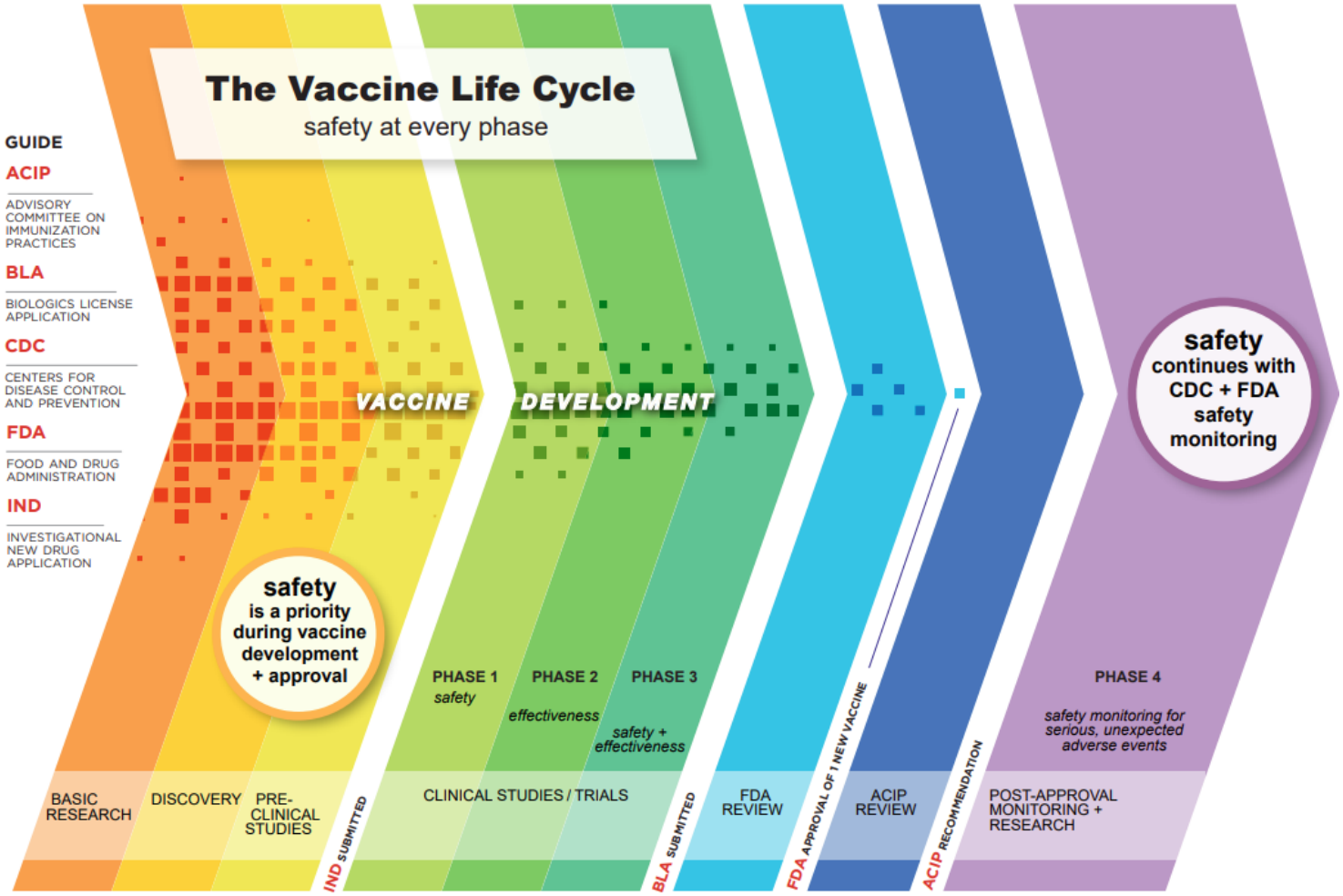
Disease	Then	Now	Decrease
Measles	530,217	9	>99%
Pertussis	200,752	1,609	>99%
Mumps	162,344	157	>99%
Rubella	47,745	3	>99%
Smallpox	29,005	0	100%
Diphtheria	21,053	0	100%
H. Influenzae	20,000	15	>99%
Polio	16,316	0	100%
Tetanus	580	19	97%
Rubella	152	0	100%

Source: Data from Centers for Disease Control and Prevention (CDC).

Graphic by Nurture KC.

NATIONAL VACCINE APPROVAL PROCESS

Understanding the vaccine approval process is key in building vaccine confidence. There are layers of checks and balances within this comprehensive system that includes 3 clinical trial phases and a 4th that monitors the vaccine and collects data. Running parallel to public participation in trials are multiple agencies and entities following where the evidence leads. In fact, vaccines are developed, tested and regulated in a process similar to other drugs but in a more rigorous manner due to the size of clinical trials and the close monitoring of vaccines in the post-licensing period.

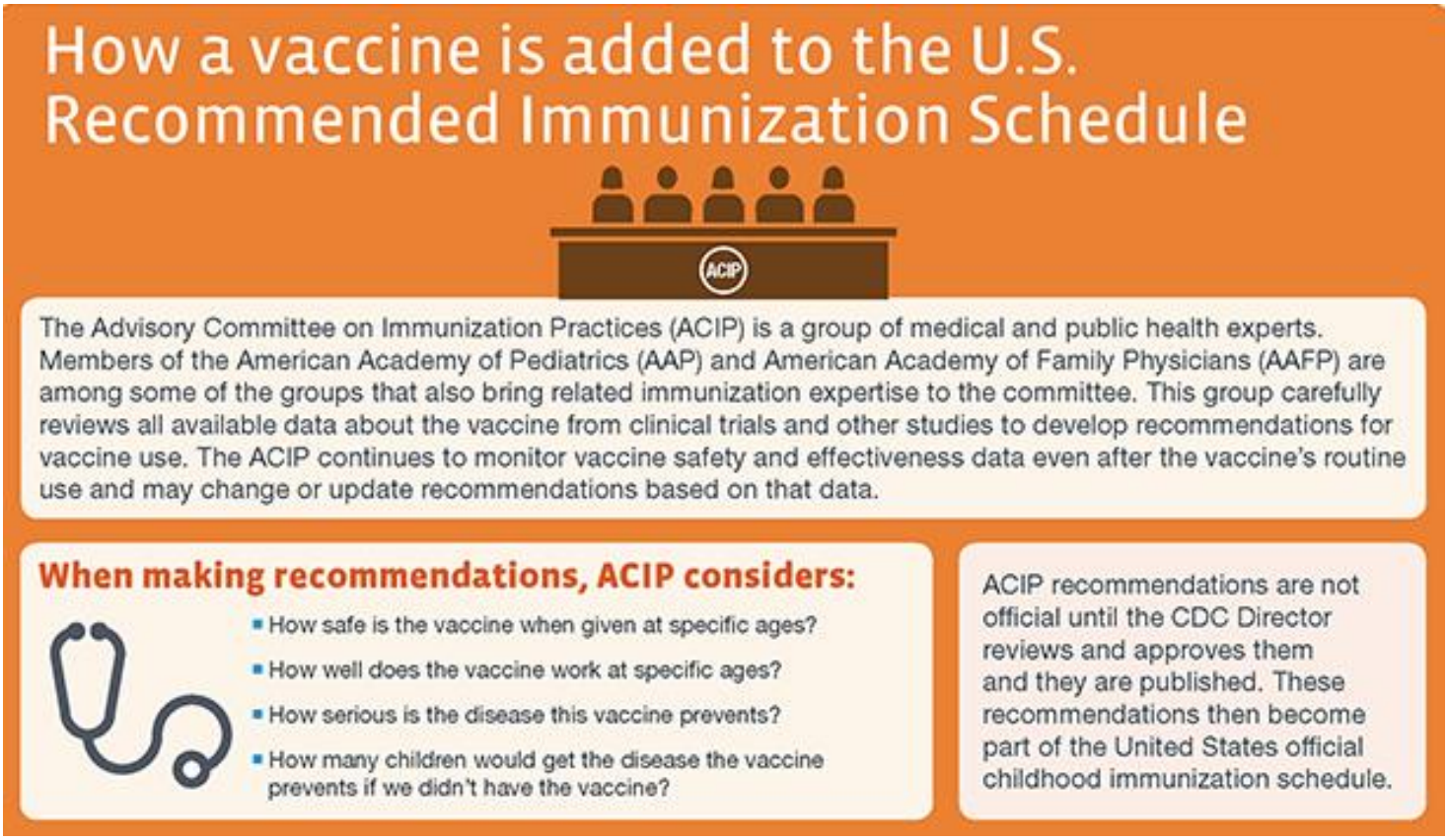


PHASE 1	PHASE 2	PHASE 3	PHASE 4
-Clinical trial 20-100 people -Is it safe? -Are there serious side effects? -Is the dose right? -Is there an immune response?	-Clinical trial of several hundred. -What are the common side effects? -Is the immune response effective? Protective?	-Clinical trial of hundreds or thousands of people. -How do the vaccinated and non-vaccinated disease rates compare?	-Research continues. -FDA continues to monitor the vaccine. -Data collected on long-term benefits and side effects.

Source: Centers for Disease Control and Prevention (CDC) at www.cdc.gov/vaccines

NATIONAL VACCINE RECCOMENDATIONS

The Advisory Committee on Immunization Practices, in partnership with the CDC Director, sets forth the vaccine schedule for the U.S. These schedules are recommendations and not mandates. Vaccine mandates are left up to states control.



Recommended Immunizations for Children from Birth to 6 Years Old

Birth	1 month	2 months	4 months	6 months	12 months	15 months	18 months	19-23 months	2-3 years	4-6 years
HepB	•HepB			•HepB						
		RV	RV	RV						
		DTaP	DTaP	DTaP		•DTaP				DTaP
		Hib	Hib	Hib	•Hib					
		PCV13	PCV13	PCV13	•PCV13					
		IPV	IPV	•IPV						IPV
				•Influenza(Yearly)*						
					•MMR					MMR
					•Varicella					Varicella
					•HepA§					

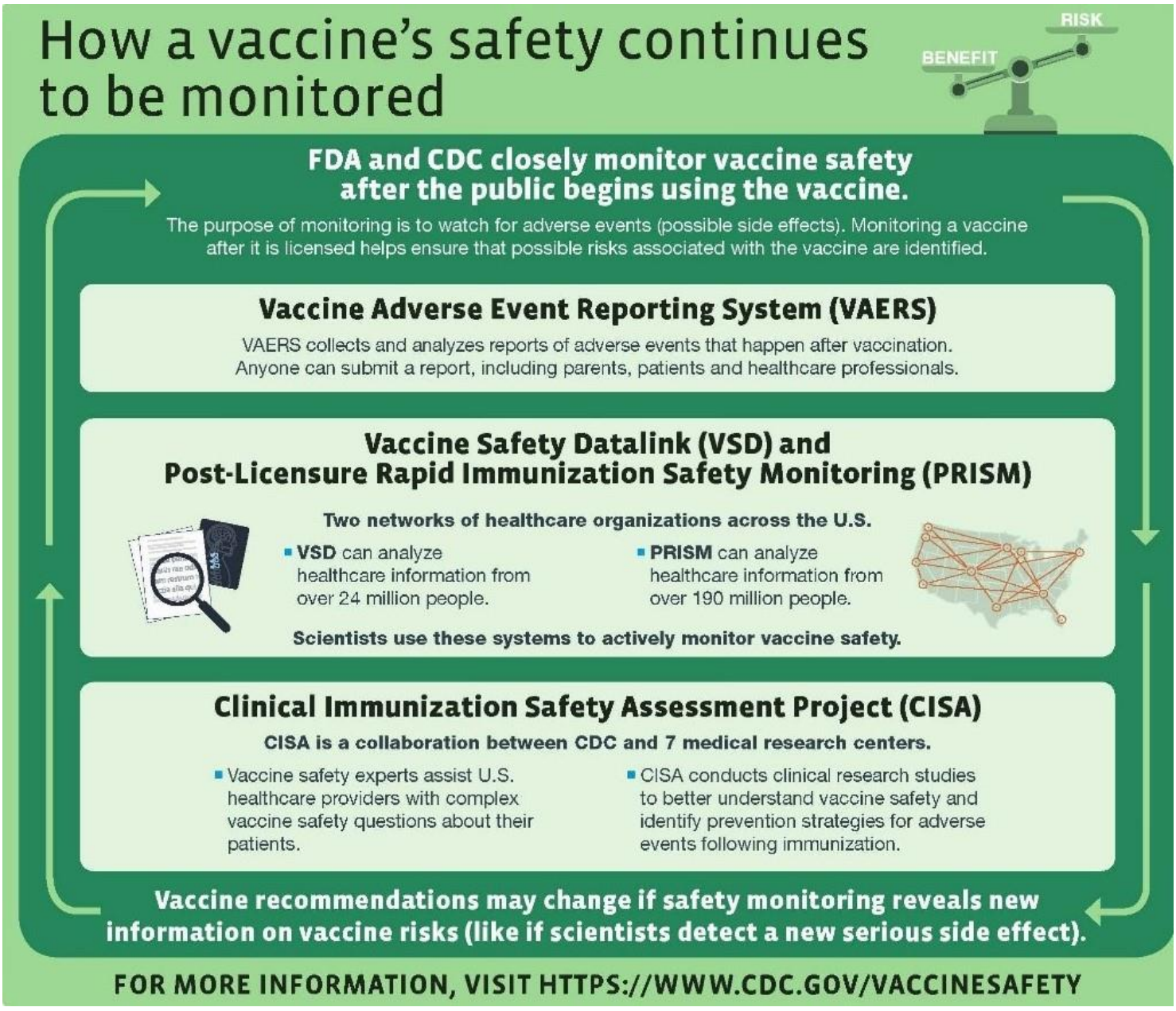
Source for both graphics: Centers for Disease Control and Prevention at www.cdc.gov/vaccines

VACCINE SAFETY MONITORING SYSTEMS

Vaccine safety is paramount to protecting kids and ensuring vaccine confidence. There are mechanisms in place for continuous data collection on vaccine efficacy and safety, and opportunities for public input.

Vaccine Adverse Event Reporting System (VAERS)
Established in 1990, VAERS provides the public with a way to voluntarily report an adverse outcome after a vaccine has been administered. This serves as an early warning system so that the CDC and FDA can monitor for any problems. VAERS accepts all submitted reports. **The adverse report is not an indication of a causal link to a vaccine. VAERS simply confirms the reported event occurred at some point after a vaccine was given.**

Vaccine Injury Compensation Program (VICP)
As with any medication, there could be some who experience a severe allergic reaction. The VICP addresses that scenario through a legal process that allows for compensation in those instances. It is a no-fault process that has been in place since 1988. It is estimated than 1 or less than 1 out of a million have a severe allergic reaction to the MMR, Hepatitis B, Diphtheria, Tetanus and Pertussis vaccines.

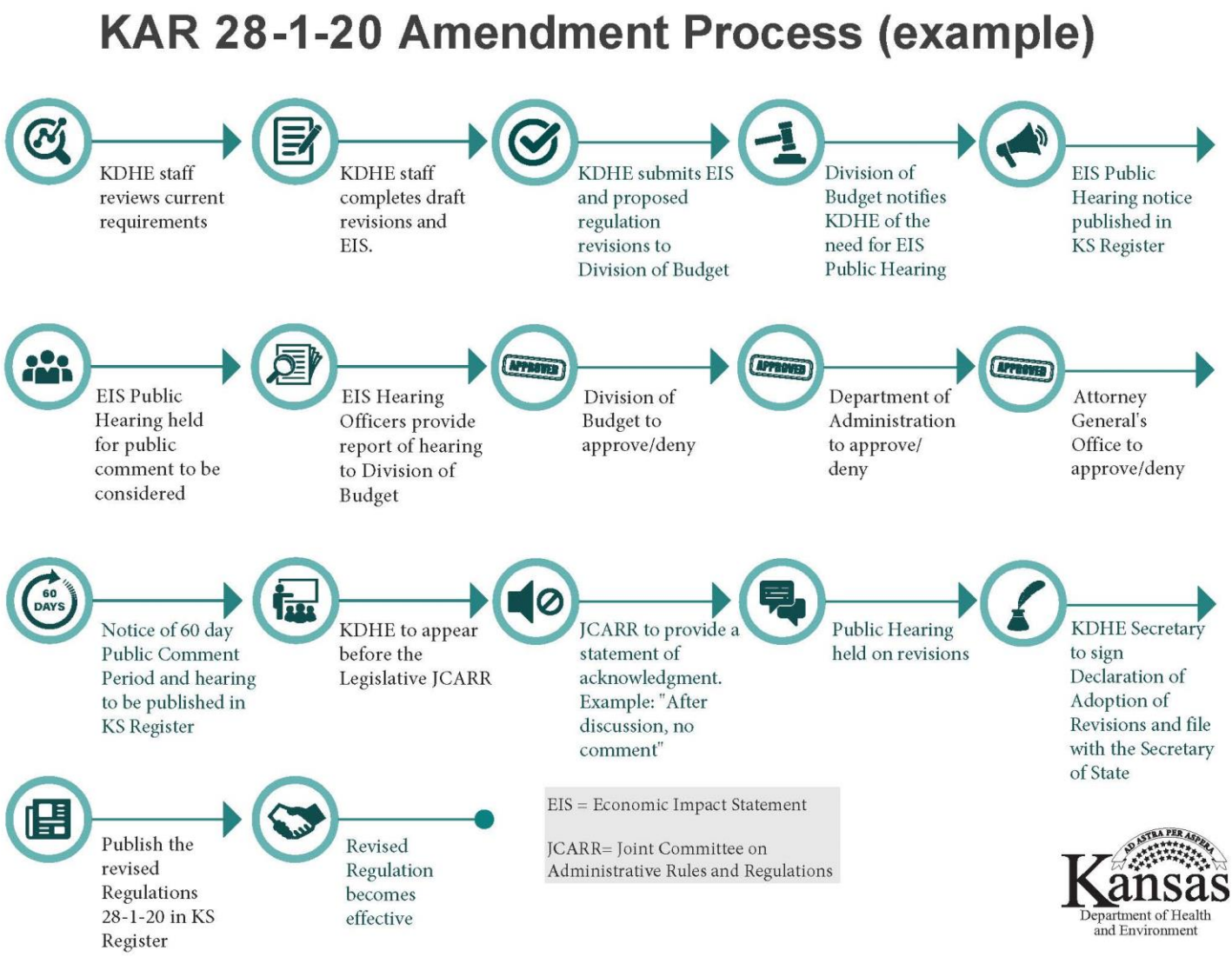


KANSAS VACCINE PROCESS

Deemed to be critical to disease prevention, childhood vaccination requirements were codified into Kansas law in 1979. KSA 72-6262 establishes the vaccine requirements for children to attend school and KSA 65-508 addresses vaccine requirements for childcare facilities. The secretary of Kansas Department of Health and Environment determines the vaccine list in compliance with these statutes as documented in KAR 28-1-20.

Any proposed changes to the vaccine schedule goes through a rigorous process that weighs evidence, expertise and public input. In 40 years, KAR 28-1-20 has been amended only 3 times:

- April 9, 2004 – Amended to include vaccines for hepatitis B and varicella.
- July 11, 2008 – Amended to include vaccines for children in child care facilities.
- August 2, 2019 – Amended to include hepatitis A and meningitis.



Source: The Kansas Department of Health and Environment

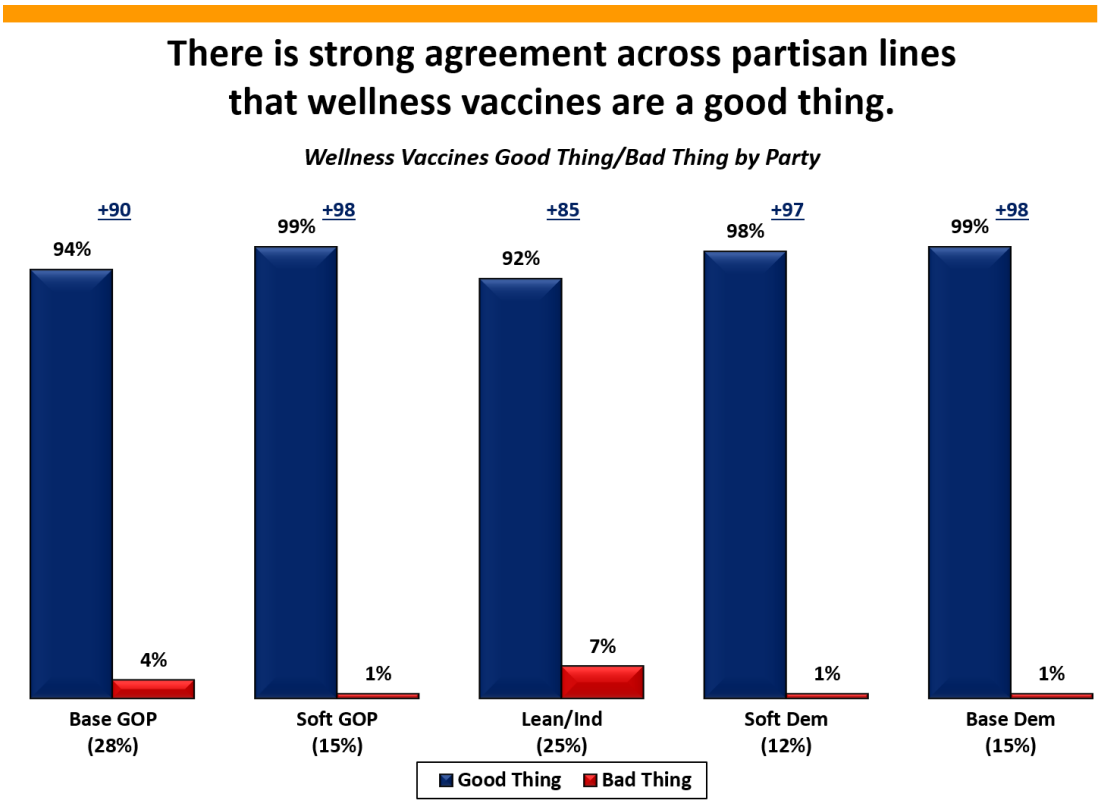
KANSAS IMMUNICATION POLL: PUBLIC SUPPORTS VACCINES

In 2022, Nurture KC commissioned an independent Kansas Immunization Poll, conducted by Public Opinion Strategies, on how Kansans felt about routine vaccines. The results show **95%** of Kansans believe taking vaccines for such diseases as measles, mumps and polio is important to maintaining good health. In fact, when it comes to staying healthy, **94%** of respondents think it is more important to get wellness vaccines than it is to get an annual check-up at the doctor. Even across political party lines, Kansas residents strong believe wellness immunizations are safe, effect and important to maintaining good health.

It could be easy to think divisions over COVID-19 vaccines policies may lead to divisions over wellness vaccine policies. But Kansans are clear – they overwhelmingly support wellness vaccines, immunization requirements for children to attend school and childcare, and leaving the authority of setting vaccine policy to the state's health department.

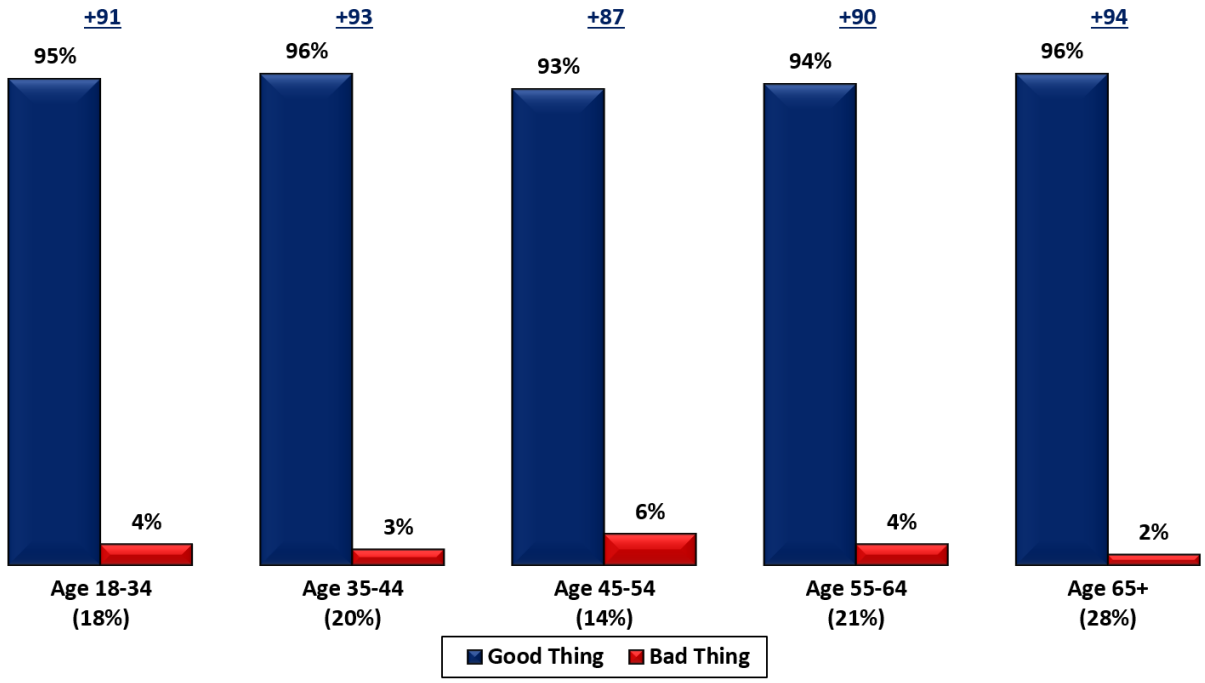
Nurture KC presented these poll results in-person with the Health and Human Services Committee of the Kansas House of Representatives and the Kansas Rural Caucus at a critical time when some Kansas lawmakers were trying to dilute state immunization requirements. These poll results showed that routine vaccinations had overwhelming bipartisan support. In the end, Kansas did **not** adopt any policies that would alter immunization requirements for school-age children. The number of bills introduced on diluting vaccine requirements greatly increased in 2022 and anti-vaccination sentiment continues to gain steam. This is why Nurture KC shared these poll results nationally. **Now the Kansas Immunization Poll is serving as a national example to protect state vaccine requirements.** See results at bit.ly/KSimmunizationpoll.

POLL HIGHLIGHTS



Voters of all ages believe wellness vaccines are a good thing.

Wellness Vaccines Good Thing/Bad Thing by Age



A large majority of Kansas voters believe the State Health Department *is* and *should* be in charge of determining wellness vaccine policy.

*"From what you know, who do you think is currently in charge of determining the wellness vaccine policy for children in Kansas?"^*

71% State Health Department

16% Elected Officials In Kansas

9% State Board Of Education

*"Who do you think should be in charge of determining the wellness vaccine policy for children in Kansas?"^^*

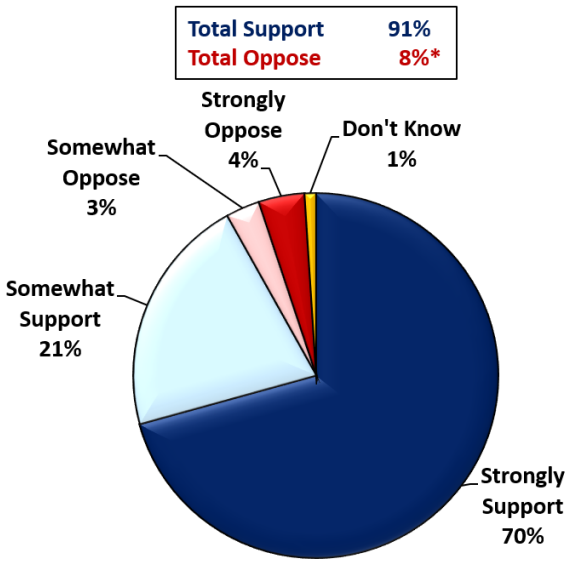
78% State Health Department

9% Elected Officials In Kansas

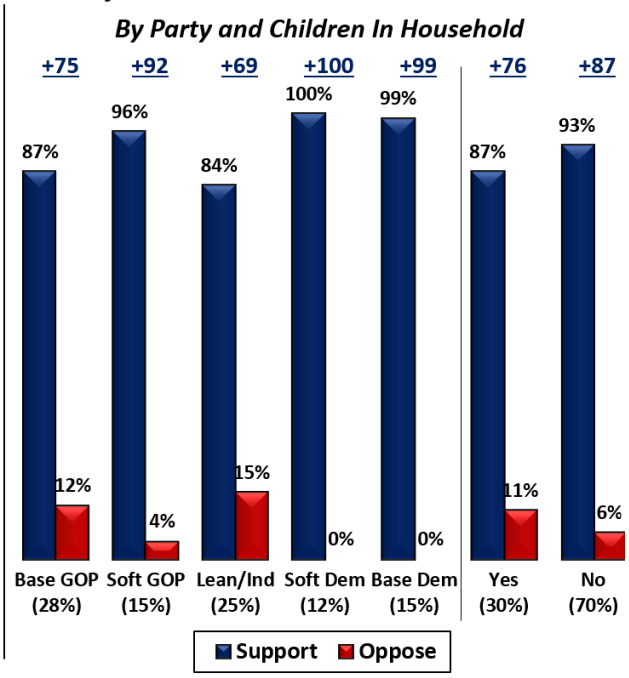
7% State Board Of Education

There is strong support for requiring the wellness vaccines for school/childcare.

"Current Kansas law requires children attending childcare facilities or K-12 schools to receive certain wellness vaccines for certain diseases. Do you support or oppose these existing wellness vaccine requirements for children attending childcare facilities or K-12 schools in Kansas?"

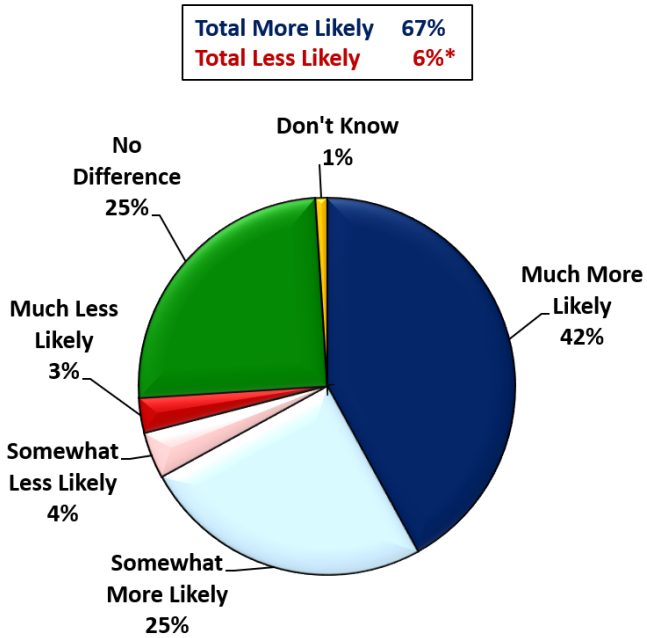


*Denotes Rounding.



Three-quarters of voters say they would be more likely to support a candidate who supported the existing vaccine requirements.

"And, would you be more likely or less likely to support a candidate for public office if they support these existing wellness vaccine requirements for children attending childcare facilities or K-12 schools in Kansas, or would it make no difference to you?"



*Denotes Rounding.