

Navigating Federal and State-Specific Laws Governing the Return of Genetic Results

12 December 2022

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All of Us Research Program





I am not an attorney



This is not an exhaustive list

1. Overview

2. Examples

3. *Solutions*

Overview | The Legal Landscape around Genetic Information and Testing

1

Requirements for
Testing

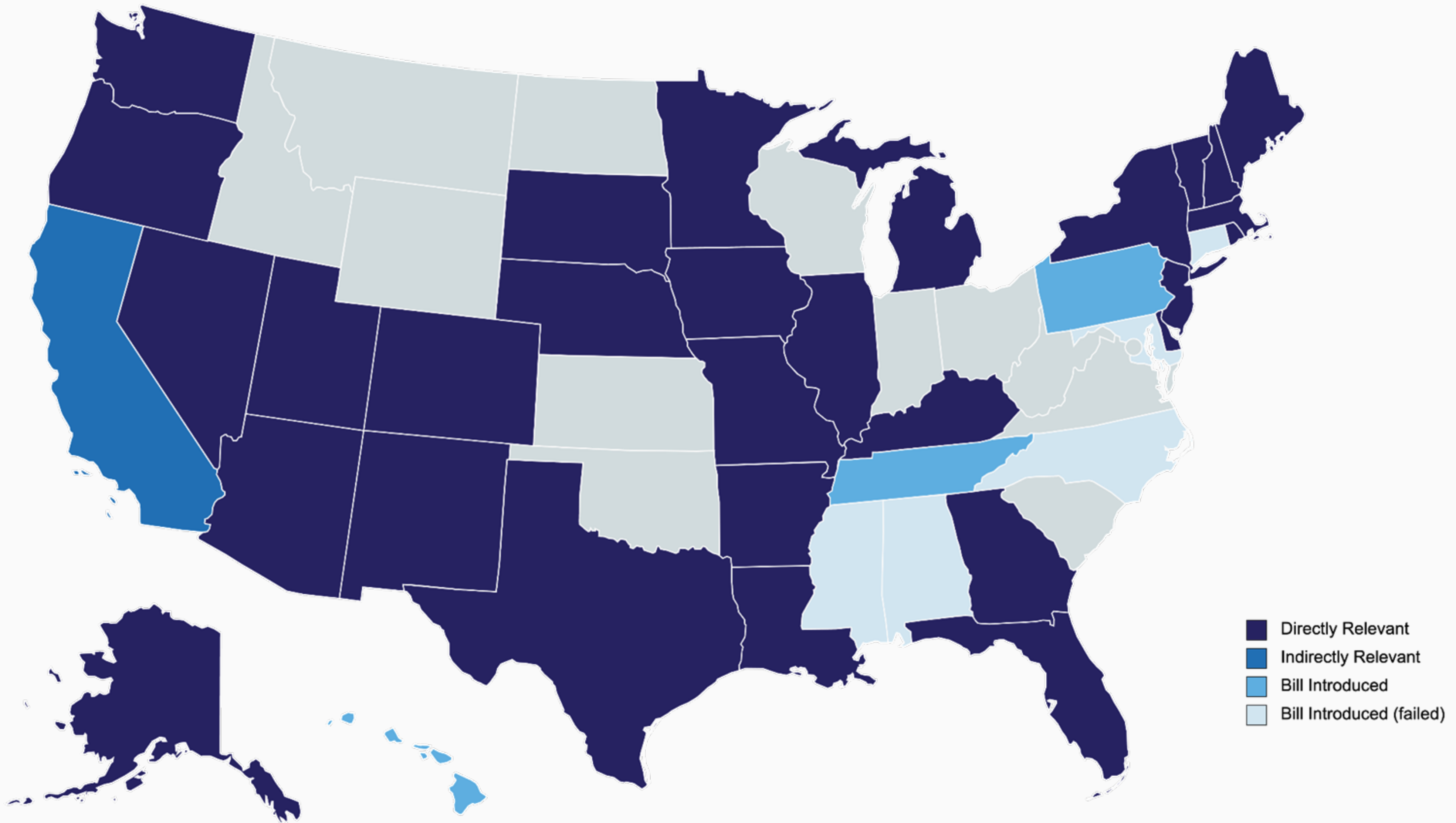
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Participant Rights:
Nondiscrimination

2

Participant Rights:
Privacy

State Laws | Genetic Information and Testing



Requirements for Testing

State Laws

- Knowledge/Informed Consent
- Valid Informed Consent



In almost all cases...

**genetic testing requires
knowledge and/or consent**

... of the person being tested



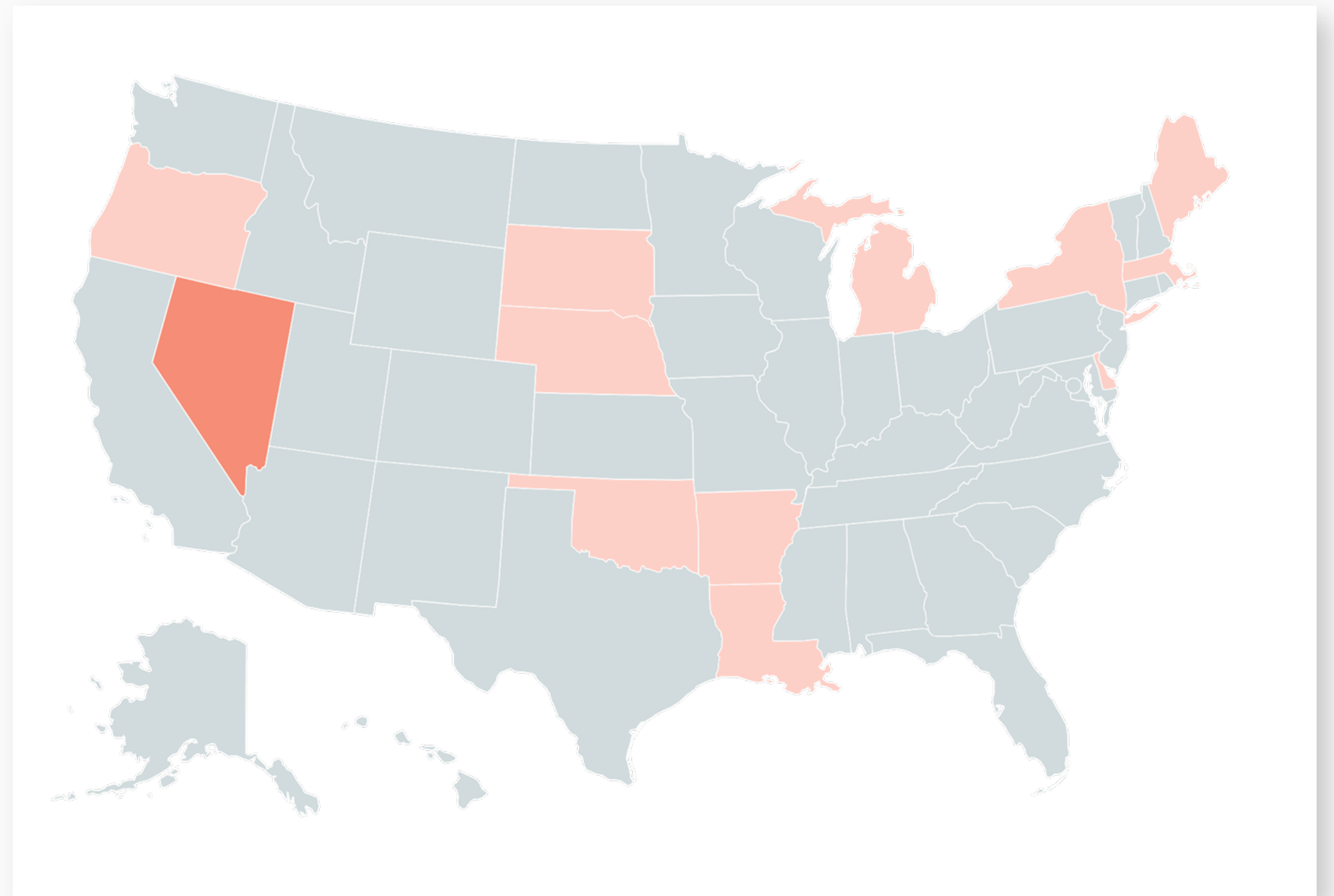
Valid informed consent...

... must be obtained in a certain way

... documentation must contain certain information

... must specify certain limits

NRS §71-551(1): Except as provided in section 71-519 and except for newborn screening tests ordered by physicians to comply with the law of the state in which the infant was born, a physician or an individual to whom the physician has delegated authority to perform a selected act, task, or function shall not order a predictive genetic test without first obtaining the written informed consent of the patient to be tested. **Written informed consent consists of a signed writing executed by the patient or the representative of a patient lacking decisional capacity** that confirms that the physician or individual acting under the delegated authority of the physician has explained, and the patient or his or her representative understands



Valid informed consent...

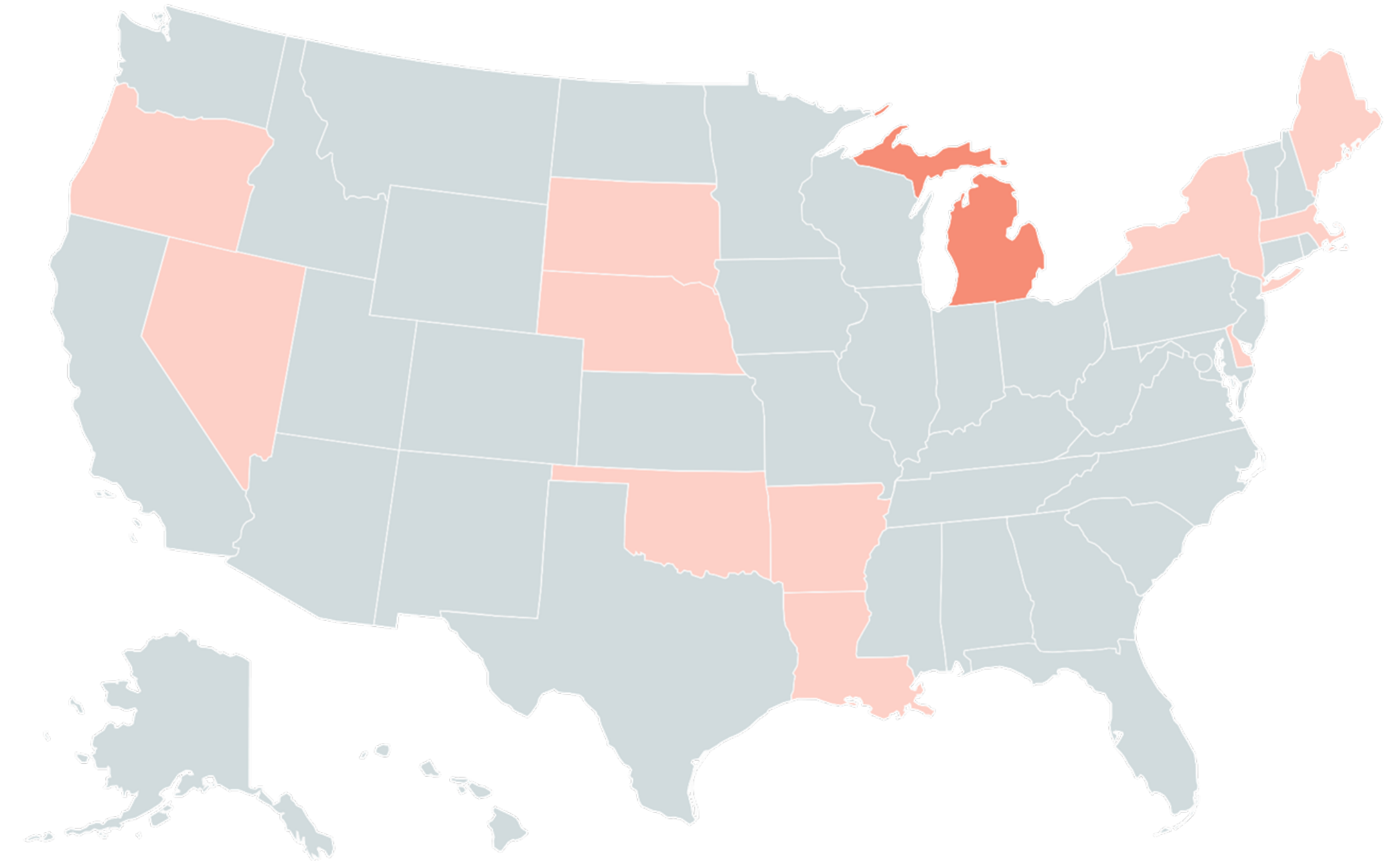
... must be obtained in a certain way

... documentation must contain certain information

... must specify certain limits

MCL §333.17520(2): ... informed consent consists of... all of the following:

- (a) The **nature and purpose** of the presymptomatic or predictive genetic test.
- (b) The **effectiveness and limitations** of the presymptomatic or predictive genetic test.
- (c) The **implications** of taking the presymptomatic or predictive genetic test, including, but not limited to, the **medical risks and benefits**.
- ...
- (e) The **meaning** of the presymptomatic or predictive genetic test results and the **procedure for providing notice** of the results to the test subject.



Valid informed consent...

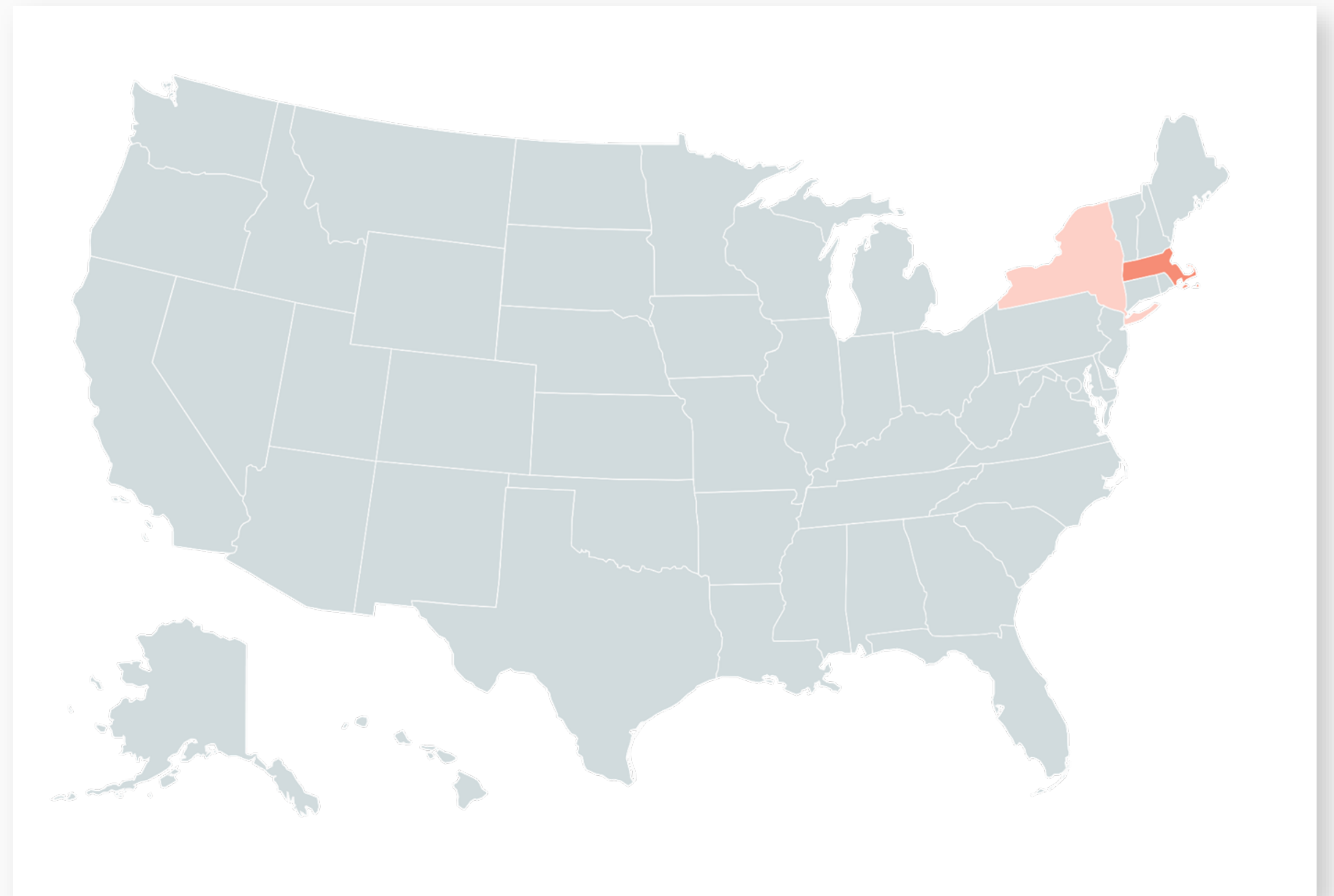
... must be obtained in a certain way

... documentation must contain certain information

... must specify certain limits

MGL Public Health 111 §70G(a): "Prior written consent", a written consent form... which shall include:

(3) a statement that the consenting person was **informed about the availability and importance of genetic counseling** and **provided with written information identifying a genetic counselor** or medical geneticist from whom the consenting person might obtain such counseling;



Valid informed consent...

... must be obtained in a certain way

... documentation must contain certain information

... must specify certain limits

ORS §192.538(5): A DNA sample from an individual that is the subject of a research project, other than an anonymous research project, shall be destroyed promptly upon completion of the project or withdrawal of the individual from the project, whichever occurs first, **unless the individual or the individual's representative directs otherwise by informed consent.**

Participant Rights: Privacy

Certificates, FOIA, and State Laws

- Withholding
- Confidentiality
- Valid Disclosures



CERTIFICATES OF CONFIDENTIALITY

42 U.S.C. § 241(D)

- Applies to identifiable, sensitive information collected during the course of federally-funded research
- Ensures limited disclosures to protect participant identities

Overhauled by the 21st Century Cures Act

BEFORE

optional

ISSUANCE

participant
identities

COVERAGE

at researcher
discretion

WITHHOLDING

n/a

IMMUNITY

mandatory and
automatic for
federally funded
research*

identifiable and *potentially*
identifiable information and
all copies

mandatory, with
some exceptions*

immune from legal
process and
inadmissible in
proceedings

AFTER

FOIA Type 3 Exemption Statute | 42 U.S.C. § 241(f)

Specific to biomedical
research information

RELEVANCE

COVERAGE

Covers identifiable
and *potentially*
identifiable
information

SEC. 2013. PROTECTION OF IDENTIFIABLE AND SENSITIVE INFORMATION.

Section 301 of the Public Health Service Act (42 U.S.C. 241) is amended by adding at the end the following:

“(f)(1) The Secretary may exempt from disclosure under section 552(b)(3) of title 5, United States Code, biomedical information that is about an individual and that is gathered or used during the course of biomedical research if—

 “(A) an individual is identified; or

 “(B) there is at least a very small risk, as determined by current scientific practices or statistical methods, that some combination of the information, the request, and other available data sources could be used to deduce the identity of an individual.

“(2)(A) Each determination of the Secretary under paragraph (1) to exempt information from disclosure shall be made in writing and accompanied by a statement of the basis for the determination.

 “(B) Each such determination and statement of basis shall be available to the public, upon request, through the Office of the Chief FOIA Officer of the Department of Health and Human Services.

“(3) Nothing in this subsection shall be construed to limit a research participant’s access to information about such participant collected during the participant’s participation in the research.”.

DISCRETION

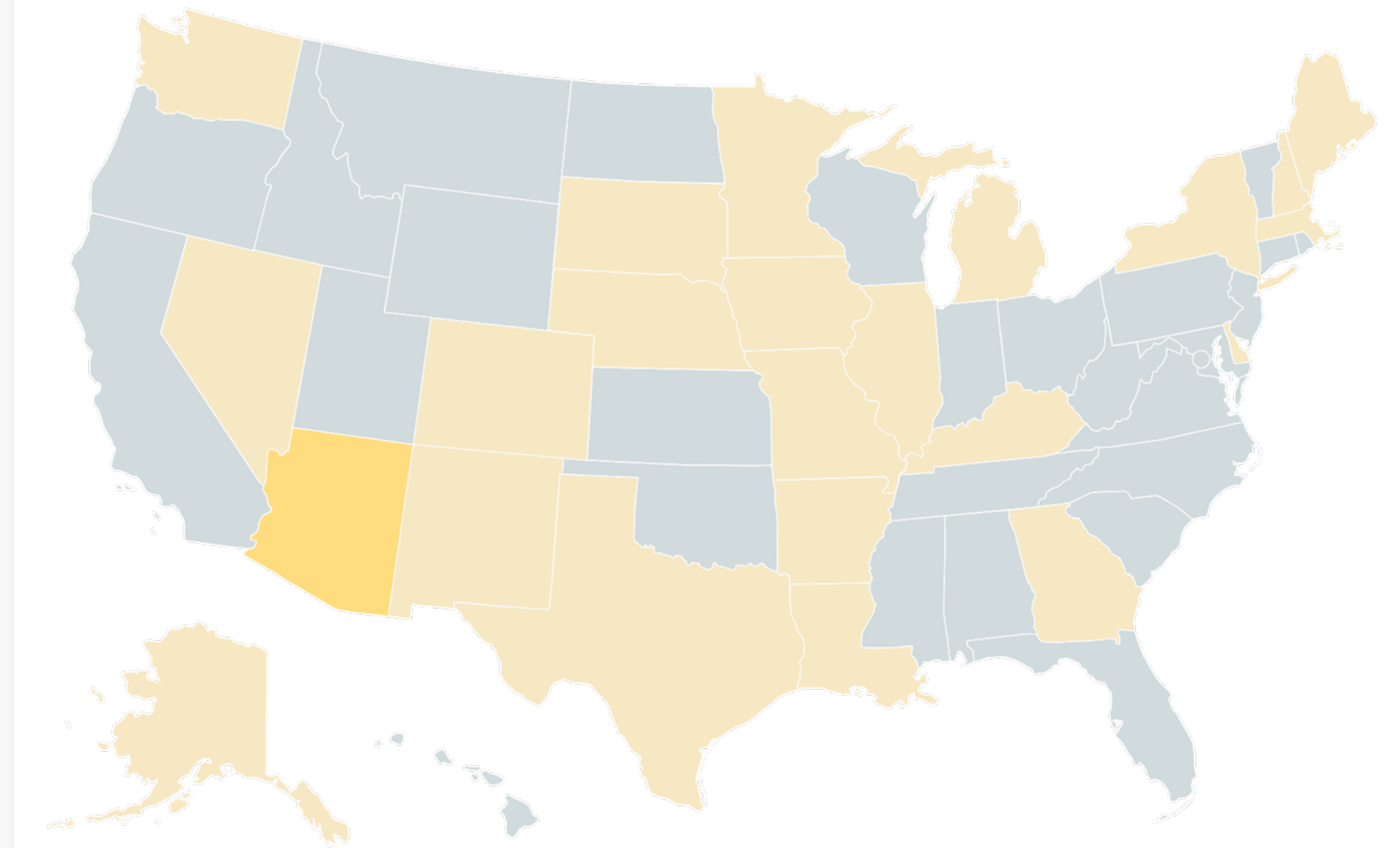
Leveraged at the
discretion of the
Secretary of HHS

EXEMPTION

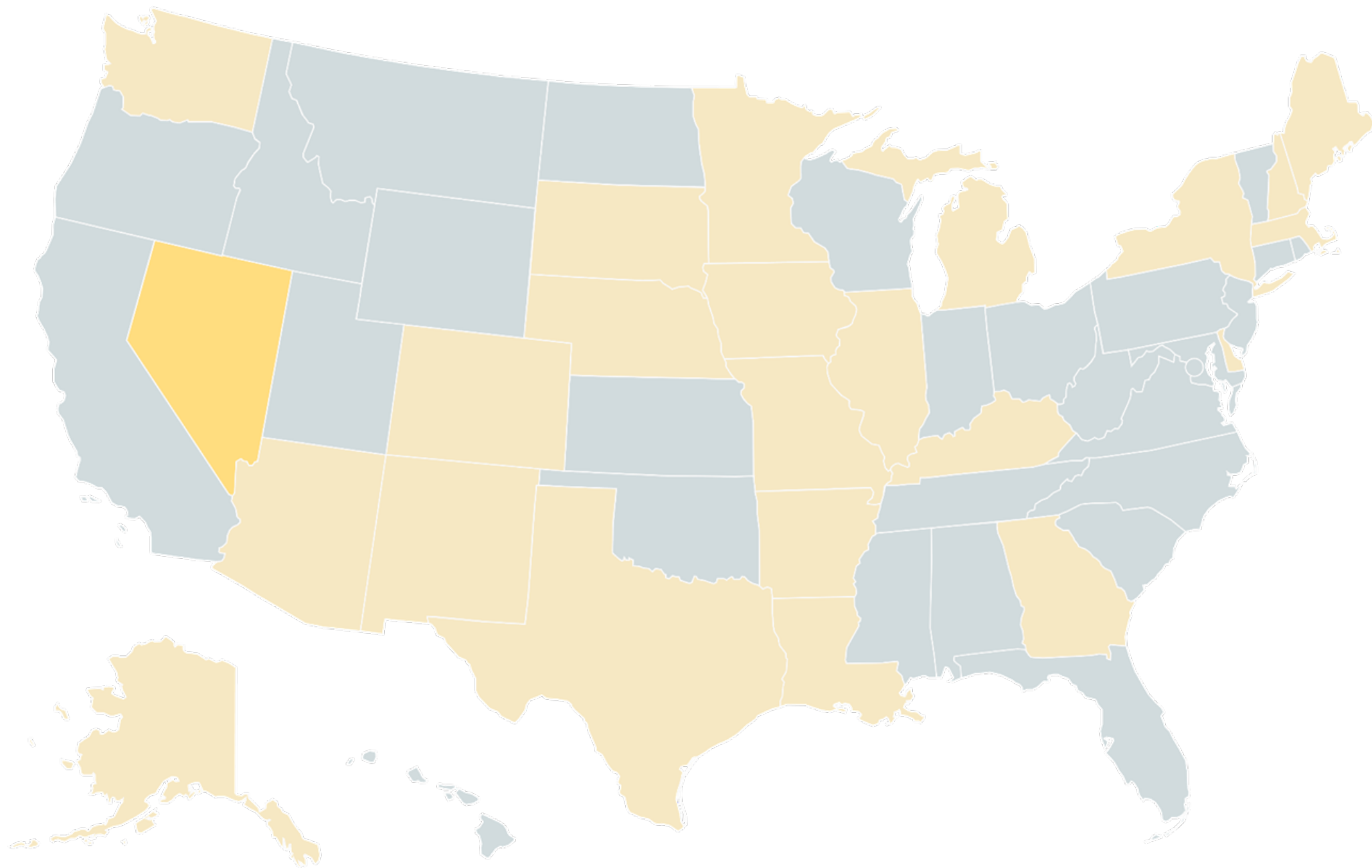
Does not interfere with
individual’s access to
information about
themselves

Privacy and Confidentiality | Additional Protections in State Laws

ARS §12-2802(A): Except as otherwise provided in this article, genetic testing and information derived from genetic testing are **confidential and considered privileged to the person tested...**



Privacy and Confidentiality | Additional Protections in State Laws



NRS §629.181(1): Except as otherwise provided in subsection 2, the State Board of Health shall by regulation:

...

(b) Prescribe a form for use in obtaining the informed consent of a person. The form must include:

(1) **Information relating to the use and confidentiality of the genetic information** of the person set forth in NRS 629.101 to 629.201, inclusive;

Privacy and Confidentiality | Stipulations for Valid Disclosures



Certificates of Confidentiality

42 U.S.C. § 241(d)(1)(C): The disclosure prohibition in subparagraph (B) shall not apply to disclosure or use that is—

- (i) required by Federal, State, or local laws, excluding instances described in subparagraph (D);
- (ii) necessary for the medical treatment of the individual to whom the information, document, or biospecimen pertains and made with the consent of such individual;
- (iii) made with the consent of the individual to whom the information, document, or biospecimen pertains; or
- (iv) made for the purposes of other scientific research that is in compliance with applicable Federal regulations governing the protection of human subjects in research.

Privacy and Confidentiality | Stipulations for Valid Disclosures

State Laws

LRS 22:1023(C)(2): To be valid, an authorization for disclosure of genetic information shall:

...

(f) State the **date upon which the authorization will expire**, which in no event shall be more than sixty days after the date of the authorization.

...

(h) Include a statement that the authorization **shall be invalid if used for any purpose other than the described purpose for which the disclosure is made.**

Certificates of Confidentiality

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Privacy and Confidentiality | Stipulations for Valid Disclosures

State Laws

FS §760.40(3): A person who performs DNA analysis or receives records, results, or findings of DNA analysis must provide the person tested with notice that the analysis was performed or that the information was received. The notice must state that, **upon the request of the person tested, the information will be made available to his or her physician.**

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Participant Rights: Nondiscrimination

GINA and State Laws

- Insurance

Genetic Information Nondiscrimination Act

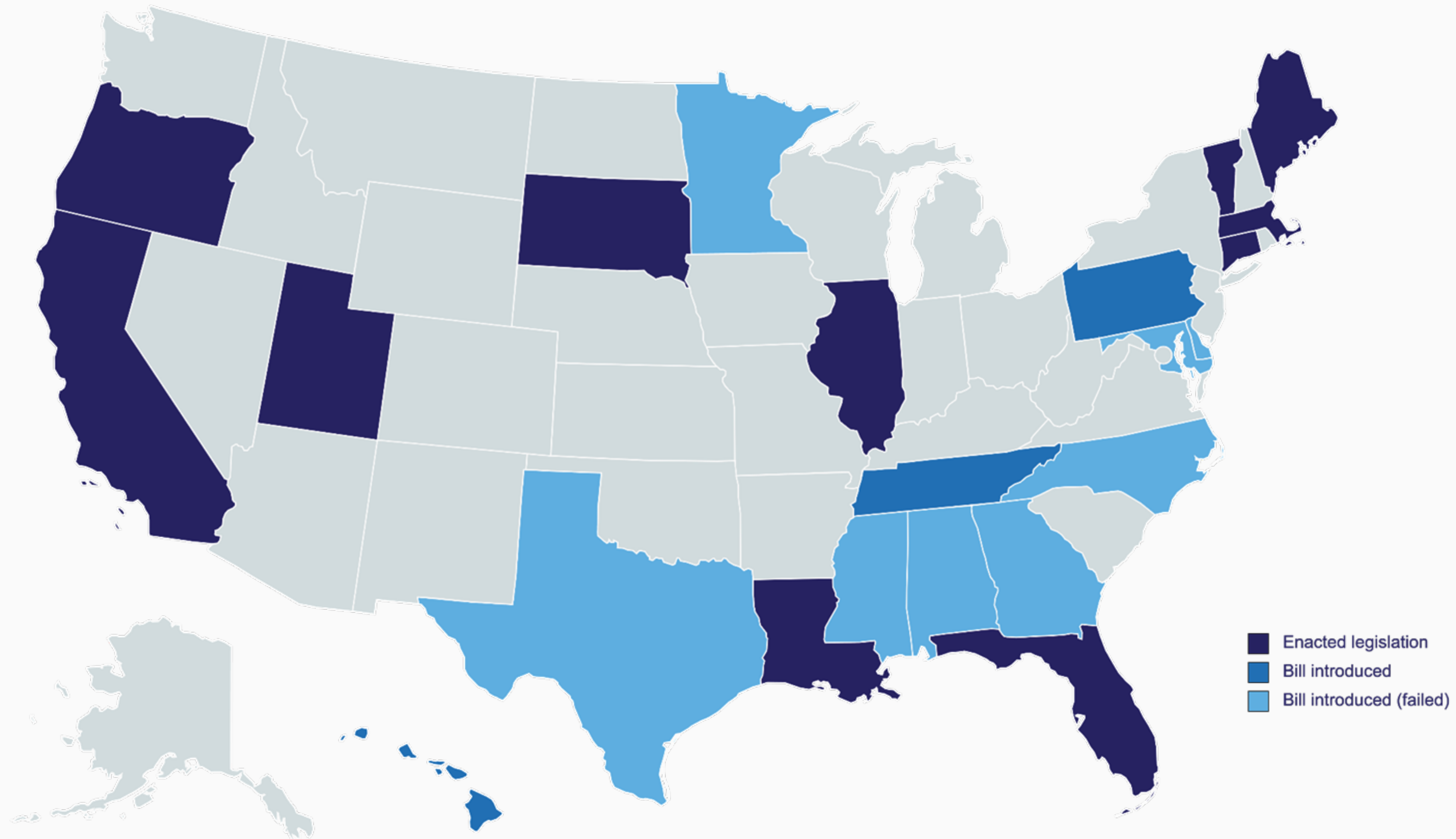
42 U.S.C. § 1320d-9:

(a) In general

The Secretary shall revise the HIPAA privacy regulation (as defined in subsection (b)) so it is consistent with the following:

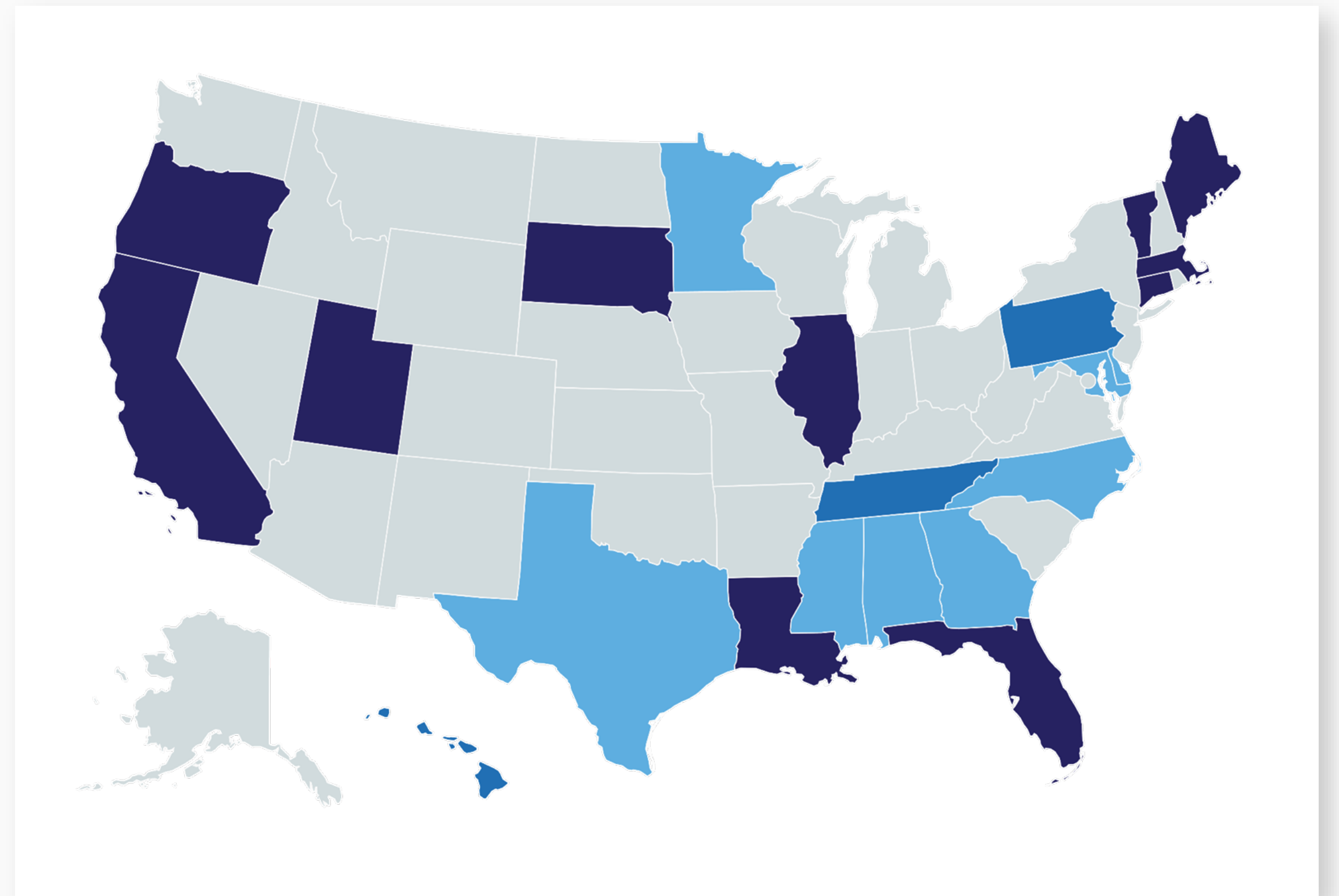
- (1) Genetic information shall be treated as health information described in section 1320d(4)(B) of this title.
- (2) The use or disclosure by a covered entity that is a group health plan, health insurance issuer that issues health insurance coverage, or issuer of a medicare supplemental policy of protected health information that is genetic information about an individual **for underwriting purposes under the group health plan, health insurance coverage, or medicare supplemental policy** shall not be a permitted use or disclosure.

States Limiting Insurance Use of Genetic Information



Generalities Regarding State-Level Protections

- Limit to **certain types of test providers** (e.g. DTC)
- Limit to **certain types of insurance** (e.g. life insurance, disability, long-term care)
- Limit **certain uses** (e.g. insurance underwriting, coverage decisions)
- Limit **certain insurer behaviors** (e.g. requiring genetic testing, asking for test results)
- Confer **certain responsibilities** (e.g. mandatory withholding)



Takeaways

- 1) Relevant laws exist at both the federal and state levels (the latter often building on the former)
- 2) There's a lot of dynamism in relevant laws, requiring potentially frequent updates to process implementation
- 3) The good news is that lots of states copy each other
- 4) Informed consent for genetic testing has state-specific requirements (but none that are mutually exclusive)
- 5) Privacy and confidentiality protections depend on a variety of factors, including data ownership and participant locality
- 6) The patchwork of state laws makes it really difficult to explain potential risks of testing related to insurability



**All
of
Us**

RESEARCH PROGRAM

Questions?

katherine.blizinsky@nih.gov

AllofUsPolicy@mail.nih.gov



@AllofUsResearch

#JoinAllofUs

AllofUs.nih.gov



National Institutes
of Health

All of Us Solutions

The *All of Us* Research Program | Diversity at Scale

Diversity of Resources: Deliver a national resource of deep **clinical, environmental, lifestyle, & biological data** from one million or more participants who are consented & engaged to provide data on an ongoing, longitudinal basis

Diversity of Participants: Reflect the broad diversity of the U.S.—**all ages, races, ethnicities, sexes, genders, SESs, geographies, & health and disability statuses**—and over-recruit those historically underrepresented in biomedical research

Diversity of Researchers: Build the tools & capabilities that make it accessible to the public and easy for researchers—**from citizen and community scientists to scientists from premier university labs**—to make discoveries using *All of Us*



The *All of Us* Research Program | Comprehensive Research Resources



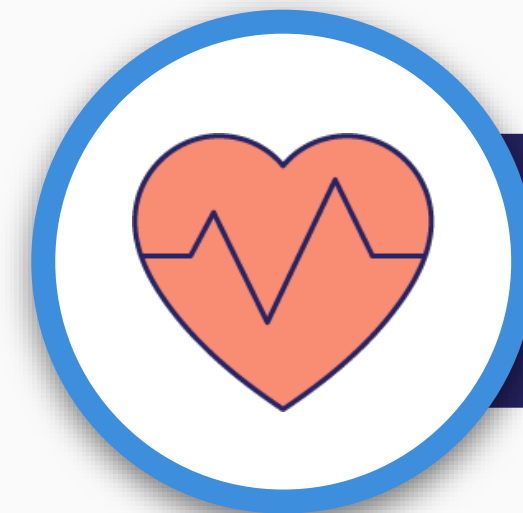
Participant Surveys

- The Basics
 - Lifestyle
 - Overall Health
 - Personal & Family Medical Hx
 - Health Care Access & Utilization
 - COVID-19 Participant Experience
 - Mental Health
 - Social Determinants of Health



Electronic Health Records

- Medical Records
 - Claims Data*
 - Pharmacy Data*
 - Vision and Dental Records*



Physical Measurements

- Blood Pressure
- BMI
- Heart Rate
- Height
- Hip Circumference
- Waist Circumference
- Weight



Biospecimens

- Blood
- Urine
- DNA (from blood or *saliva*)
- Saliva*
- RNA*



Mobile/Wearable Tech



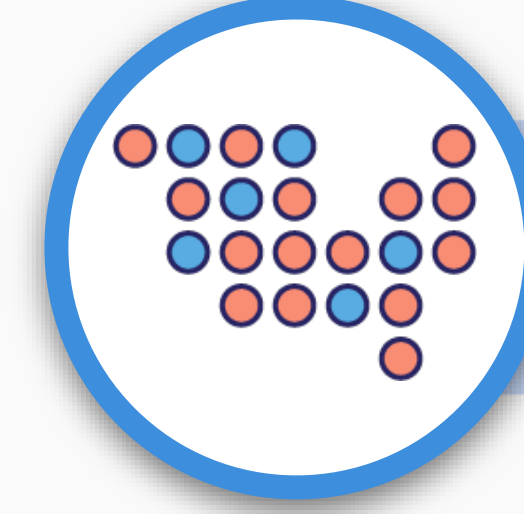
Assays

- COVID Serology
- HbA1c*
- Heavy Metals*



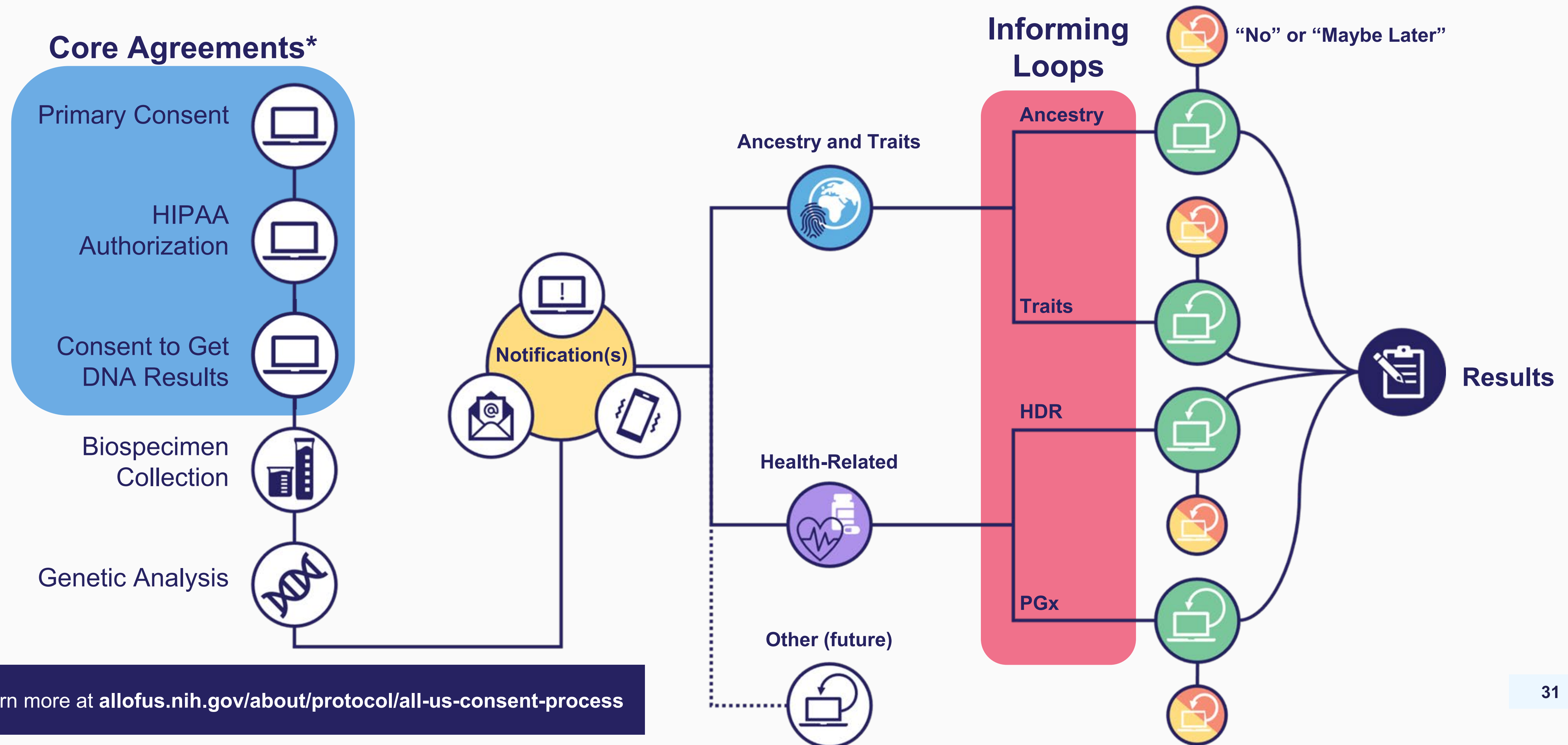
Omics

- WGS
- Arrays
- Other Omics*

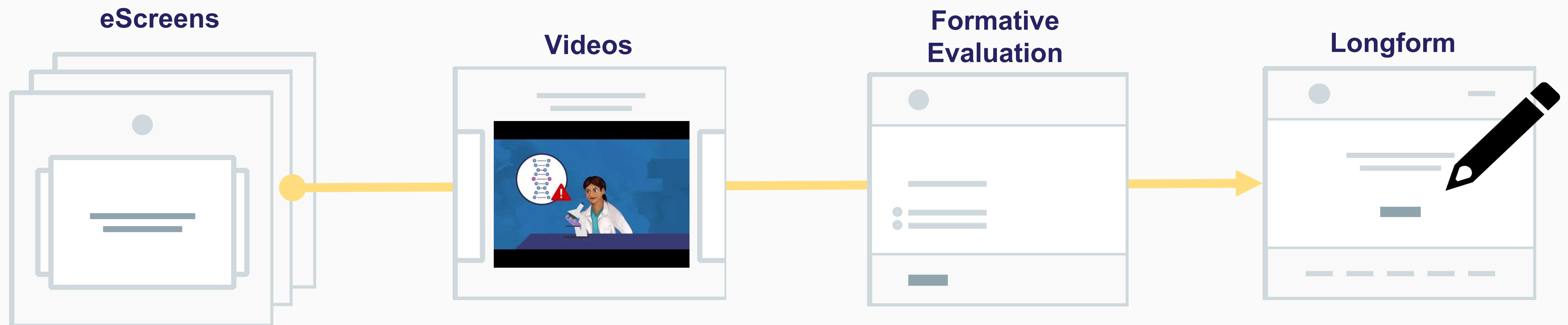


Geospatial/Environmental Data

The *All of Us* Consent Process | Overview



The *All of Us* Consent Process | Consent Modules



learn more at allofus.nih.gov/about/protocol/all-us-consent-process

Primary Consent | Setting the Stage

PURPOSE

Orient participants to the *All of Us* Research Program overall and give them information salient to projected risks and benefits of participation; set expectations about participation into the future.

CHALLENGES

- State laws and regulations
- Changes (program operations, technological developments, social context) → Threshold for re-consent

All of Us Research Program — Sample Consent Form
March 29, 2021

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Consent to Join the *All of Us* Research Program

Principal Investigator: Paul Harris, Ph.D.
Vanderbilt University Medical Center
2525 West End Ave, Suite 1500
Nashville, TN 37203

Sponsor: National Institutes of Health

This form is for people age 18 or older.

This form tells you about the *All of Us* Research Program (*All of Us*). It explains what we will ask you to do if you join. Please read this form carefully. If you have questions, there is a list of people you can ask at the end of this form. We will give you a copy of this form.

What is *All of Us*?

All of Us is a health research program funded by the U.S. government. If you join, other people will be looking for people's information. We hope

How to

All of Us withdraw



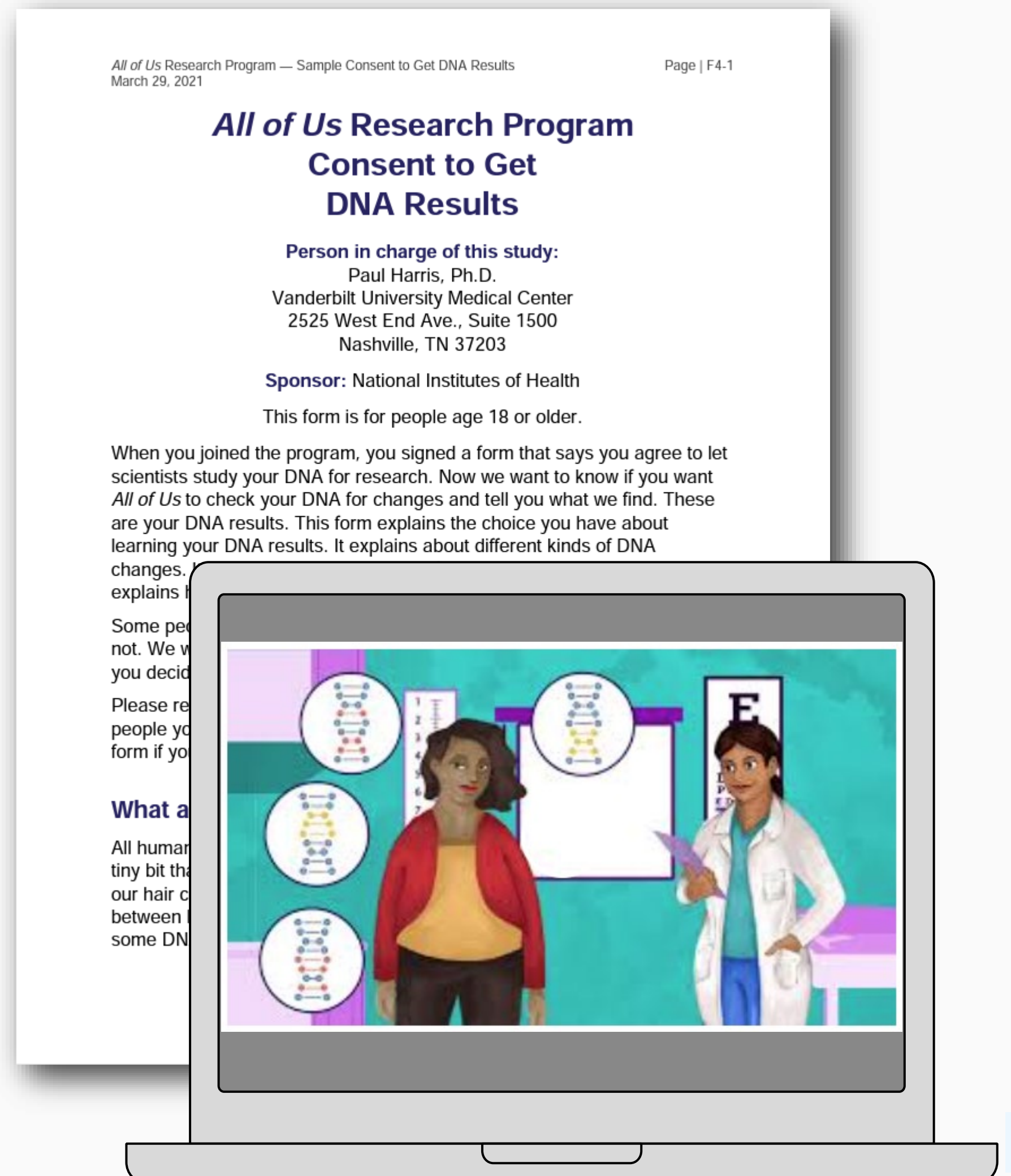
Consent to Receive DNA Results | Consenting to Return of Information

PURPOSE

Describe the process and limitations of return of genetic and genomic results; set realistic expectations for participants about what they can expect to receive; explain potential risks and benefits to learning such results

CHALLENGES

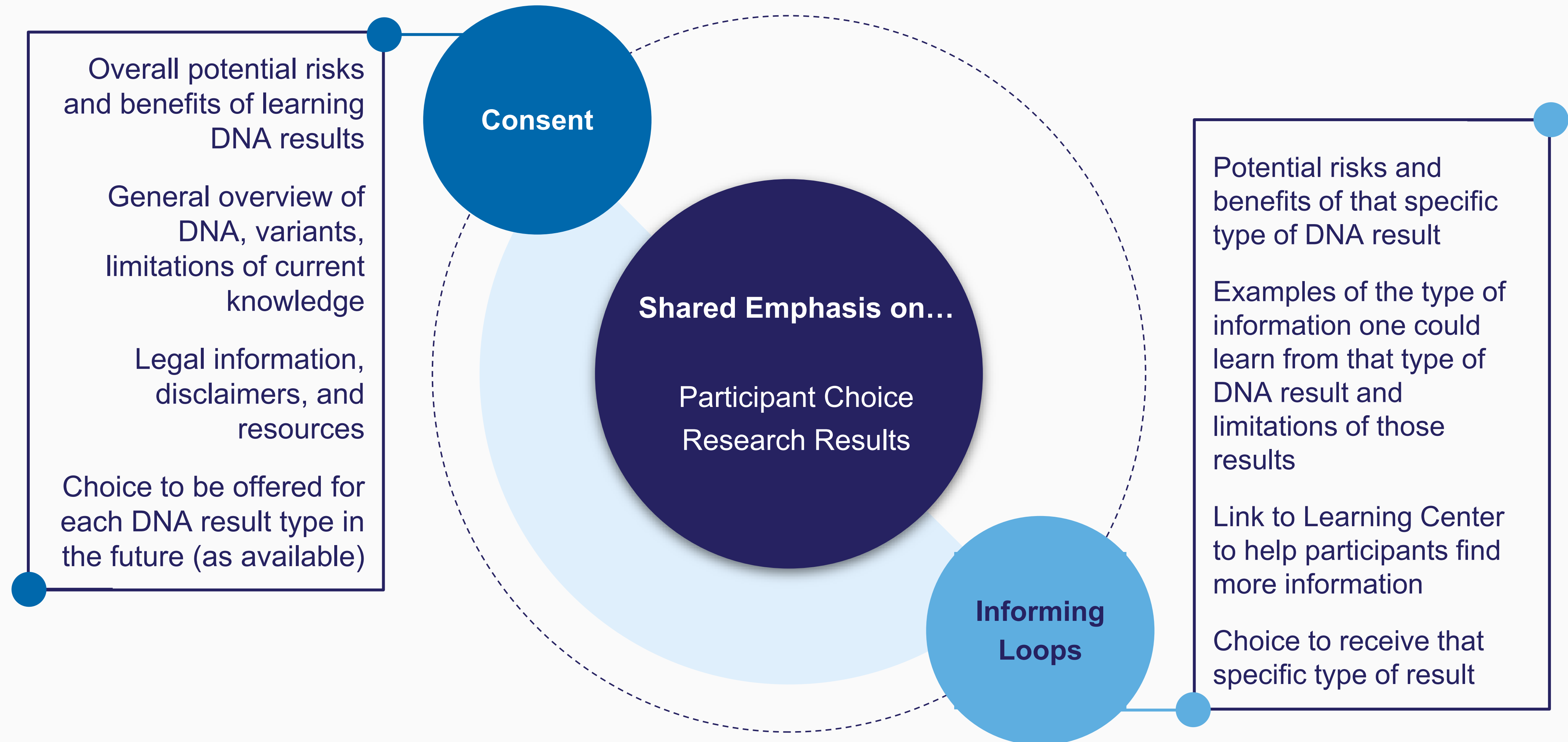
- Different reason for obtaining consent
- Rapidly changing, complicated science
- Social and cultural implications
- Inconsistent legal protections



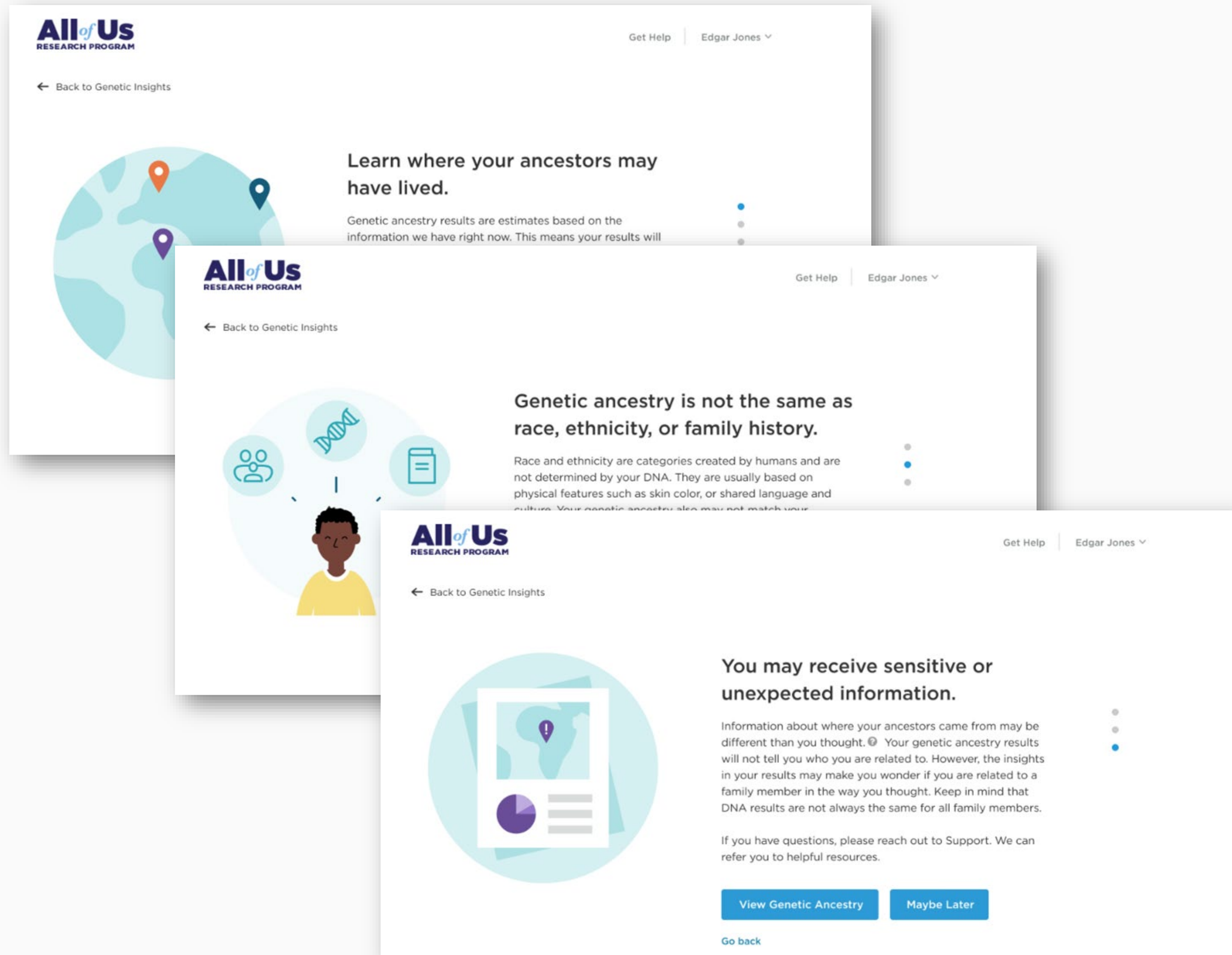
yes means yes.

everything else means no.

Informing Loops | Just-in-Time Information



Informing Loops | Just-in-Time Information



- Set participant expectations
- Explain limitations of the science
- Provide additional information (?)
- Integrate paths to assistance

Consent | Integrated Assistance

Are you ready?

If you have questions along the way

We're in this together. We're always here to answer any questions you may have about *All of Us*.

Contact our Support Center

Talk directly to a person on our team.

 1-844-842-2855

Chat now


Send us a message. We'll respond within 48 hours

 help@joinallofus.org

Toll-free TTY-based Telecommunications Relay Service is available by dialing 711.

Supported Decision Making | *All of Us* Education and Decision Tools

Participant Learning Center



DNA & Genomics

DNA is an important source of information about health. Learn about the role of genes, what DNA does, and how genetic testing works.

What is DNA? What are genes?

DNA is short for deoxyribonucleic acid. DNA is the material that makes up genes. Genes carry information that determine your traits, such as your hair color, eye color, and risk of developing some diseases. DNA is passed on from parents to their kids. Half of your DNA came from your

How do genes affect health and disease?

Our bodies are very complex. They require teamwork from many kinds of molecules in our bodies. Proteins are specific molecules that carry out nearly everything happening inside our bodies. Genes help make the proteins and tell them what to do. A change in a gene's DNA can

What is a genome?


Your genome is your complete set of DNA. It acts like a personal blueprint, storing the information needed to build and maintain your body.

What is the difference between “genomics” and “genetics”?

Genetics studies how genes are passed down in your family. When studying genetics, researchers

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What are genes?

Genes are made up of DNA. They come in many different sizes. Every person has two copies of each gene, one from each parent. Genes carry information that determine your traits, and genes are how you got your traits from your parents. This includes traits such as your hair color, eye color, and risk of developing some diseases.


Some of your genes make proteins in your body and tell them what to do. Proteins are specific molecules that carry out nearly everything that happens inside our bodies.



Video from University of Utah: <http://learn.genetics.utah.edu/content/basics/proteins>

Supported Decision Making | All of Us Education and Decision Tools

Participant Learning Center



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>

Decision Support Tool

If I decide to receive my DNA results...

☒

I may learn that I am at increased risk for some health conditions.

☒

It may help my healthcare provider take better care of me.

☒

It may help my healthcare provider make decisions about my medicines.

☐

I may need more expensive health care.

☐

It might be harder or more expensive to get disability, life, and long-term care insurance.

☒

I may feel confusion or worry about my results.

☒

My blood relatives may find out things about their health, too.

☐

I may need to take time off work to care for my health.

☒

I may not find out anything useful.



**All
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RESEARCH PROGRAM

Questions?

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#JoinAllofUs

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National Institutes
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