

BILL ANALYSIS

Senate Research Center

S.B. 1583
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AUTHOR'S / SPONSOR'S STATEMENT OF INTENT

Gain of function research deals with altering the way a pathogen works through experimentation that would increase the transmissibility, virulence, immunogenicity, or other capabilities of the pathogen.

Gain of function research involving potentially pandemic pathogens is research that enhances the transmissibility and/or virulence of any pathogen that would result in wide and uncontrollable spread or cause significant morbidity in the human population. This is extremely concerning because it can introduce "manmade" viruses that present a new danger to the public. Additionally, these viruses can also be mutated to create biological weapons.

H5N1 was a highly transmissible, fatal virus affecting ferrets created using gain of function research. Due to concerns over the likelihood that the virus could mutate and spread to humans, in 2014, the Obama administration issued a moratorium to temporarily halt federal funding for gain of function research. In 2017, the moratorium was lifted, and additional guidelines were adopted to add additional security measures for this type of research.

The Government Accountability Office recently released a report with concerns that these new guidelines did not go far enough to adequately ensure adequate safety measures were in place. In fact, Anthony Fauci himself evaded the moratorium because it applied to pathogens that were "naturally occurring," and after mutating certain pathogens, Fauci argued that they were no longer naturally occurring and thus no longer fell under the definition of prohibited research.

There are some that are concerned that the COVID-19 virus was a product of gain-of-function research and that steps need to be taken to prevent another such pandemic. More alarming is the concern that this type of research presents a bioterrorism and biosafety threat and that the inevitable risks outweigh any possible benefit.

This bill would define gain of function on potentially pandemic pathogens and prohibit institutions of higher education in Texas from conducting this type of research.

The bill would revoke any public funds from being used for these research projects and would require that any research projects conducted by any private entities involving gain-of-function on potentially pandemic pathogens be reported to the Department of State Health Services (DSHS) with information on location, type of research, and the impact to the state if the virus were released to the public.

The bill creates a civil penalty for failure to report required research projects to DSHS.

As proposed, S.B. 1583 amends current law relating to prohibiting institutions of higher education or entities receiving public funds from conducting gain of function research on potentially pandemic pathogens in this state and creates a civil penalty.

RULEMAKING AUTHORITY

Rulemaking authority is expressly granted to executive commissioner of the Health and Human Services Commission in SECTION 4 (Section 81.454, Health and Safety Code) of this bill.

SECTION BY SECTION ANALYSIS

SECTION 1. Provides that the legislature finds that:

- (1) gain of function research was a concern for the federal government, resulting in a three-year moratorium on the funding of that research from 2014 to 2017;
- (2) the COVID-19 pandemic may have been the result of a pathogen leak from a secure lab in which gain of function research was being conducted;
- (3) gain of function research, which involves manipulating potentially pandemic pathogens, poses a biosecurity vulnerability to this state; and
- (4) residents of this state have a right to know the vulnerabilities posed by gain of function research on pathogens.

SECTION 2. Amends Subtitle H, Title 3, Education Code by adding Chapter 158, as follows:

CHAPTER 158. RESEARCH INVOLVING POTENTIALLY PANDEMIC PATHOGENS

Sec. 158.001. GENERAL DEFINITIONS. Defines "gain of function research" and "institution of higher education."

Sec. 158.002. DEFINITION OF POTENTIALLY PANDEMIC PATHOGEN. (a) Defines "potentially pandemic pathogen."

Sec. 158.003. PROHIBITED GAIN OF FUNCTION RESEARCH ON POTENTIALLY PANDEMIC PATHOGENS. (a) Prohibits an institution of higher education, notwithstanding any other law, from conducting or providing funding to another entity to conduct gain of function research on potentially pandemic pathogens.

(b) Provides that an institution of higher education that violates this section is ineligible to receive state funds.

SECTION 3. Amends the heading to Chapter 81, Health and Safety Code, to read as follows:

CHAPTER 81. COMMUNICABLE DISEASES; PUBLIC HEALTH DISASTERS; PUBLIC HEALTH EMERGENCIES; POTENTIALLY PANDEMIC PATHOGENS

SECTION 4. Amends Chapter 81, Health and Safety Code, by adding Subchapter K, as follows:

SUBCHAPTER K. REPORT ON RESEARCH INVOLVING POTENTIALLY PANDEMIC PATHOGENS

Sec. 81.451. DEFINITIONS. Defines "institution of higher education" and "potentially pandemic pathogen."

Sec 81.452. REQUIRED REPORT. (a) Requires each entity, including an institution of higher education and a private college or university, or other private entity, that intends to conduct research on a potentially pandemic pathogen in this state, regardless of whether the entity will use state money for the research, at least 90 days before beginning the research, to provide to the Department of State Health Services (DSHS) a written report on the intended research that includes the following information:

- (1) the location where the research will be conducted;
- (2) the scope, nature, and purpose of the research;
- (3) the source of funding for the research;

(4) the identity of the pathogen, including the strains or variant of the pathogen, that will be used or analyzed in the research;

(5) the potential impacts the pathogen will have on the public if released into the general population; and

(6) the measures the entity will take to ensure the pathogen is not released into the general population.

(b) Requires an entity that submits a report under Subsection (a), on DSHS's request, to provide to DSHS any additional information that DSHS determines is necessary for DSHS to:

(1) properly inform federal, state, and local governmental authorities that the research will be conducted; and

(2) ensure adequate response plans and resources are available in the event a potentially pandemic pathogen is released into the general population.

(c) Authorizes DSHS, if, after reviewing the information the entity submits under Subsections (a) and (b), DSHS determines that the entity's intended research poses a substantial and unjustifiable risk to public health and safety, the capacity of public health systems, or the security of the state, to:

(1) for research conducted by an institution of higher education, request the governor to issue an order prohibiting the research; or

(2) for research conducted by a private college, university, or other private entity, request the attorney general to seek an injunction to enjoin the conduct of the research.

Sec. 81.453. CIVIL PENALTY. (a) Provides that an entity that fails to timely submit a report required by Section 81.452 is liable to this state for a civil penalty in an amount not less than \$50,000 or more than \$100,000 for each violation. Provides that each day of a continuing violation is a separate violation.

(b) Authorizes the attorney general to investigate an alleged violation of this section and to sue to collect the civil penalty.

(c) Provides that sovereign or governmental immunity of an institution of higher education to suit is waived and abolished to the extent of liability created by this section.

Sec. 81.454. RULES. Requires the executive commissioner of the Health and Human Services Commission (executive commissioner) to adopt the rules necessary to administer this subchapter, including rules prescribing the form and manner of submitting the report required by Section 81.452.

SECTION 5. Requires the executive commissioner to adopt rules necessary to implement Subchapter K, Chapter 81, Health and Safety Code, as added by this Act, as soon as possible after the effective date of this Act.

SECTION 6. Effective date: September 1, 2023.