

## Lindsey Causer

---

**From:** Rachel Weston [REDACTED]  
**Sent:** Thursday, April 13, 2023 6:46 PM  
**To:** House Education  
**Subject:** Opposition to HB 105

Dear Members of Alaska House Education Committee,

I am writing to express my severe opposition to HB105/SB96, which is a cruel and unmitigated attack on Alaska's LGBTQ+ youth. The fact that this bill is being touted as a strengthening of parental rights is nothing but a farce; parents in Alaska already have the rights that this bill claims to be bestowing. Parents can remove their children from school at any point and have access to the curriculum, materials, and performance standards. Parental rights are a red herring - Governor Dunleavy's bill is nothing but a discriminatory attack on Alaska's LGBTQ+ children based solely on fear and bigotry.

In a time when real challenges and dangerous threats to our country's education system abound (teacher shortages, funding cuts, horrific mass shootings), the last thing we should be doing is contributing to these problems by making school a more unsafe space for our LGBTQ+ children. By requiring teachers to effectively out children to their parents, this bill will be potentially putting those children in harm's way at home if their home environment is not supportive of their identity. Nobody has the right to out another person without that person's permission, and it is appalling that this bill requires just that. By banning transgender and non-binary children from using the bathroom that corresponds with their gender identity, this bill discriminates against some of our most vulnerable children, who are already at a higher risk of rejection, discrimination, and suicide than other children. These stipulations remove safety, privacy, and dignity from students' experiences at school, and expose them to added risk of harm.

The cruelty is mindblowing. How a child identifies and which bathroom they use is not a threat to any other child's experience at school or to the quality of their education. It galls me that Governor Dunleavy would rather spend his time devising ways to make Alaskan childrens' lives more difficult than addressing the real challenges facing our state right now.

Please, please, do not pass this bill.

Sincerely,  
Rachel Weston  
Juneau, AK

## Lindsey Causer

---

**From:** Michele Foley [REDACTED]  
**Sent:** Thursday, April 13, 2023 6:44 PM  
**To:** House Education  
**Subject:** In opposition to HB105

Good evening-

I oppose HB105.

Several years ago, my third grade granddaughter regaled me with a story about an event in her class. A young friend of hers was telling my granddaughter that his mother and father had divorced. His mother had a girlfriend, and the young boy said that his mother's girlfriend was very nice and would play board games with him, and read to him. Another young school mate who had overheard his narrative, said "That's disgusting for a mom to have a girlfriend." My granddaughter turned to the schoolmate and said "Are you a homo phobe?" I think that if a 10-year understands the cruelty of that hateful student's statement, we as adults should be able to recognize the hate and discrimination in HB105.

Governor Dunleavy is woefully misguided in putting forth this bill to appease his base. He talks about the mental health issues plaguing our youth yet decides that it is appropriate to codify discrimination for the youth in schools who already are facing problems. As related to teaching sexual education in the school, he is taking us backwards. It is vitally important for kids to learn about their bodies and reproductive systems. There is an excellent article in the Washington Post, 3/25/2023 by Maham Javaid. The event in this article took place in 1935 and is about a 13-year old girl who committed suicide after getting her first period because she had not been taught about menstruation and believed that she had a venereal disease and thought that her period was a shameful disease. A young Episcopalian deacon officiated her funeral and vowed to devote his life to battling ignorance and despair about sexual issues. Almost 90 years later, the United States is inundated with bills such Dunleavy's which purport to advance parental rights. However, these bills throw us back into the dark ages. Information and communication are key to promoting good decision-making for kids at all stages of their lives.

Dunleavy's bill also casts dispersion on the value of public education by indicating that teachers indoctrinate students. My children attended, and my grandchildren attend excellent schools in Fairbanks, Alaska. I have volunteered in both generation's classes. I found all of the educators with whom I interacted and who taught my children, to be strong, principled, and devoted to doing the best job that they could for **all** students- any socio-economic, ethnicity, race, and ability. My family has been blessed to have such wonderful educators in our children's lives.

Please preserve **your** integrity and do the right thing and vote NO on HB105!

Michele Foley  
[REDACTED]  
Fairbanks, AK 99707

## Lindsey Causer

---

**From:** kristen schupp [REDACTED]  
**Sent:** Thursday, April 13, 2023 6:44 PM  
**To:** House Education  
**Subject:** Opose HB 105

Greetings ,

I am strongly opposed to HB105. I am a parent to four school children. This bill is punitive to students, educational staff and school districts.

Parents rights do not usurp the inherent worth and dignity of children and their personal rights and freedoms. Children are not babydolls to be controlled and manipulated, they are independent humans who deserve respect. If a child feels more comfortable being themselves at school rather than their parents, that is not the fault of the schools but of the parents. And students, educators and districts should not be penalized for that. That is legislative overreach.

And enabling and encouraging parents to sue school districts is shockingly irresponsible when our districts are undergoing budget crisis and already having difficulty providing quality educational environments for our students.

Also comprehensive sex education needs to be a standard part of curriculum not something only to be opted in and shouldn't even be opted out of. We need to be educating students about consent and healthy relationships to reduce teen pregnancy, abortions, STD's, sexual assault and rape.

For all students safety and well being please do not support this bill.

Thank you,  
Kristen Schupp  
Fairbanks  
[REDACTED]

## Lindsey Causer

---

**From:** Meg Waite [REDACTED]  
**Sent:** Thursday, April 13, 2023 6:46 PM  
**To:** House Education  
**Subject:** HB 105: Meg Waite

Hello, my name is Megan "Meg" Waite.

I am strongly in opposition to HB 105. Please vote no.

I believe in the separation of Church and State, and protecting the First Amendment rights of all citizens, not just a select few.

All families have the right to exercise their personal beliefs and values in their homes and respective religious communities.

Public education is a place to learn new ideas, solve problems, and set goals related to academics and career planning.

I am extremely concerned with the language of this bill. The language in this bill enables unsafe households and supports harassment in the workplace.

This bill will create barriers for students who may be experiencing sexual and physical abuse to not be able to come forth to educators, regardless of gender.

This bill does not protect the privacy of students that may need additional support outside of their homes, such as through guidance counseling toward additional resources.

The language of this bill, while it mentions gender identity, pronouns, and sexual and reproductive education, opens doors for harassment for those experiencing disabilities, differences in learning styles, and in need of more specialized care.

This bill is written in a way that public schools, educators, and student support staff may face litigation by family members that may be directly harming a student.

This bill will create more barriers for students to mental health care and other resources by not being able to privately disclose information to a trusted adult outside of the home.

If my name is Megan but I go by Meg, the language of this bill is such that it can be interpreted that an educator may face repercussions for focusing on a student's individuality if there are differences in opinions between parents, students, and educators.

Alaska has extremely high rates of suicide, domestic violence, drug abuse, and mental illness. This bill gets in the way of any resources and safety nets in place to provide our students with the tools and resources to go on to life peaceful and impactful lives as proactive community members in Alaska.

Please focus on legislation that supports mental health and physical health resources for students, employers, educators and families.

This bill will not educate our students and staff, it will not prevent sexually transmitted diseases or unwanted pregnancy, and it will limit resources and safety for students of all genders experiencing sexual abuse, physical violence, and bullying at home and in our Alaska communities.

Vote no on HB 105.

Thank you,  
Meg Waite

Meg Waite

*she | her | they | them*

UAF- Student, CNSM

**ASM Young Ambassador** to Alaska

*"Let your curiosity be greater than your fear" -Pema Chödrön*

## Lindsey Causer

---

**From:** Dan Cannon <[REDACTED]>  
**Sent:** Thursday, April 13, 2023 6:49 PM  
**To:** House Education  
**Cc:** Rep. Sara Hannan; Rep. Andi Story  
**Subject:** HB 105 Public Testimony - Dan Cannon - Juneau - 99801

I'm writing in **opposition to HB 105**. I tried to call in tonight (4/13) to testify over the phone more than a dozen times and received a busy signal the entire time. So here is my testimony:

This bill is a purposeful and direct attack on our LGBTQ community cloaked as a parental rights issue. **I'm opposed to HB 105.**

Not surprisingly, it was introduced by our Governor, who is desperate for national political attention but lacks his own creativity and original ideas - so he copycats his fellow minions across the country who are waging an anti-LGBTQ culture war, stoking division, and hate. The sad truth is this culture war is working, and we have seen proof of it [right here in Juneau \(Mitchell Thomas Watley and his notes\)](#).

Protecting some of our most vulnerable youth means giving them the support and trust they need. Especially at school. LGBTQ youth are more than four times as likely to attempt suicide than their peers (Johns et al., 2019; Johns et al., 2020). For LGBTQ youth, finding the trust and support they need at home (from parents and family), unfortunately, isn't always possible. Language in this bill puts LGBTQ youth who don't have the trust/support of their family/parents at greater risk:

- (7) requiring written permission from a parent before the name or pronoun used by a public school to address or refer to the parent's child in person, on school identification, or in school records is changed;

**I hope you will stand with your LGBTQ constituents (not Governor Dunleavy and his fellow hate-stoking minions) by voting against HB 105.**

1327 W. 9th Ave, Suite 300 Anchorage, AK 99515  
**Dan Cannon**  
Juneau 99801

PS: It's embarrassing so many Alaskans have to waste their time speaking out against this bill, and you - our elected officials have to waste your time (I'm sorry) discussing this instead of the real problems with education in our state - lack of funding. Governor Dunleavy is an embarrassment.

--  
**Dan Cannon**  
Public Lands Coordinator  
He/Him/His  
Living and working on Lingít Aani in A'akw Kwáan territory



[REDACTED] Anchorage, Alaska 99501  
Main: [REDACTED] | Direct: [REDACTED] | Cell: [REDACTED]

[Book a meeting with me via Calendly! AlaskaConservation.org](#)

"Don't be afraid of being vilified; the struggle for justice has never been a popularity contest" - Kumi Naidoo.

## Lindsey Causer

---

**From:** swighs <[REDACTED]>  
**Sent:** Thursday, April 13, 2023 6:52 PM  
**To:** House Education  
**Subject:** No to HB

I am writing with strong opposition to HB 105. This bill will create an unsafe environment for LGBTQ+ children in our state.

Sarah Sullivan  
Fairbanks, Ak

Sent via the Samsung Galaxy S22 Ultra 5G, an AT&T 5G smartphone

## Lindsey Causer

---

**From:** Natalie Weinberg <[REDACTED]>  
**Sent:** Thursday, April 13, 2023 6:54 PM  
**To:** House Education  
**Subject:** Natalie Weinberg on HB 105

Greetings,

My name is Natalie Weinberg, I live in Juneau, Alaska, and I'm writing in opposition of HB 105.

The bill enforces a total ban of vital sex education below the 4th grade. Teaching our kids about appropriate touch and boundaries is critical to recognizing sexual abuse. As a victim of sexual assault, I believe it's important to learn to hold your boundaries, I also believe it's important to teach how to respect boundaries, and this is something you learn as a child. I fear the unsafe consequences for our future if this legislation is put into law. We should be empowering our students with concepts of bodily autonomy. Knowledge is power!

Thank you for your time.

Natalie Weinberg

## Lindsey Causer

---

**From:** Denali Psychiatry <[REDACTED]>  
**Sent:** Thursday, April 13, 2023 6:58 PM  
**To:** House Education  
**Subject:** HB105

I am a resident of Anchorage, and own a small business. I oppose HB 105, as it adds yet another layer of bureaucracy to our already over-burdened teachers, with no gain.  
Merijeane Moore, DLFAPA

## Lindsey Causer

---

**From:** Erica Watson <[REDACTED]>  
**Sent:** Thursday, April 13, 2023 7:01 PM  
**To:** House Education  
**Subject:** HB 105

Hello, my name is Erica Watson, and I am writing from McKinley Village, just outside Denali National Park. I tried to call in to testify during this evening's hearing but was unable to get through, so I'm writing instead.

I use she/her pronouns, I am an auntie, and I have worked in various capacities as an educator for both children and adults. **I am strongly opposed to HB 105.**

I know you have already heard from a number of Alaskans explaining why targeting vulnerable young people is a bad idea, and I am simply adding my voice in solidarity with queer and trans Alaskans and allies who believe it is our duty as caring adults to support and provide resources for the young people in our lives as they grow into their truest and fullest selves.

This afternoon I encountered a quote from a writer named Frida Berrigan that resonates, and I'd like to share: "How can I be a parent who is learning alongside my marvelous child rather than imposing my vision of the world on her little shoulders?" I think this speaks to not only parents, but aunties, uncles, educators, coaches, spiritual leaders, any of us who are blessed to be part of the villages supporting children on their journey into adulthood.

I encourage everyone here this evening to strive to be the kind of adult who a child feels safe expressing their authentic selves with, and if we are not, perhaps focus our energies on understanding why that might be, rather than pushing demonstrably harmful legislation like HB 105.

Thank you.

Erica Watson

--

Erica R. Watson

[REDACTED]  
[REDACTED]

Denali Park, AK

## Lindsey Causer

---

**From:** Tracy Goldsmith [REDACTED]  
**Sent:** Thursday, April 13, 2023 7:05 PM  
**To:** House Education  
**Subject:** Oppose HB105

Hello House Education Committee,

You've heard some very moving testimony tonight in opposition to HB105. I will echo some of the comments you've already heard. There are already procedures in place to give parents notification about sensitive topics, and they already have the option to opt out. Adding the burden of permission slips just adds one more thing for our understaffed and stretched-too-thin schools to do.

Forcing teachers to notify parents of pronouns and nicknames damages the relationship building that is so important when creating a safe environment for learning and could possibly harm the child at home. Parents are the first teachers. If their child is not ready to tell them their concerns about pronouns, gender, or sexuality, there is probably a reason and those parents should work on building their relationship with their child so the child feels more comfortable/safe having these discussions at home. The LGBTQ+ kids have the highest rate of suicide in this country--we need to do more to support them, not put them in harm's way.

Please vote no on this bill and spend more time working to solve actual problems in this state.

Thank you,  
Tracy Goldsmith

## Lindsey Causer

---

**From:** Benjamin Kellie [REDACTED]  
**Sent:** Thursday, April 13, 2023 7:08 PM  
**To:** House Education  
**Cc:** Rep. Jamie Allard; Rep. Justin Ruffridge; Rep. Mike Prax; Rep. CJ McCormick; Rep. Thomas McKay; Rep. Rebecca Himschoot; Rep. Andi Story  
**Subject:** Testimony OPPOSED to HB105

Hello,

My name is Ben Kellie. I am a resident of Anchorage, Alaska and am writing this email in my personal capacity as a citizen of Alaska.

I am strongly, stridently, and wholly **OPPOSED to HB105** in any form. I stand with the Alaskans who, during the last testimony period, made clear their strong opposition to this bill. We do not need outside politicians driving legislation in Alaska, nor do we need to advance legislation that will hurt children.

I am a straight, white, cisgendered man, a business owner, and a father. It may seem odd to you for someone like myself, who is neither transgendered nor has transgendered children, to have such a strong opinion on this issue. Though I was never in favor of legislation targeting trans people, the full weight of the importance of supporting our trans neighbors became clear to me about six years ago.

I was volunteering at a "Speed Mentoring" event in Anchorage where kids from all over the district go from table to table to learn about different career opportunities that they may want to pursue one day. A young person sat down at my table and, according to my log sheet they were named "Beth" (changed to protect them). I addressed them as such and they said, "Actually my name is Tyler. Isn't that weird?" I told them, "No that's not weird, I'm happy to call you whatever you'd like."

The look that came over that child's face when I said that simple sentence is hard to describe. Surprise and happiness, yes, but mostly relief. Remembering their reaction brings tears to my eyes because they simply wanted something that I received and took for granted every single day: To be who they are, and to be comfortable doing it.

When the time to change tables came, Tyler asked not to leave. I let them stay at the table and introduced them to each new round of students who joined us. None of the students had any issues with Tyler being there and being called by their preferred name, and everyone got along famously. Between rounds Tyler began to open up to me about the struggles they'd faced with their family and in their community. When I consider now that 82% of trans kids contemplate suicide, I am filled with dread for Tyler and hope they are ok.

It's hard enough to be a teenager in this world without being targeted for who you are. HB105 does not keep kids safe. HB105 would have caused someone like Tyler to hide, feel ostracized, and not able to open up to someone at a networking event.

It is important for cisgendered allies to stand-up for our neighbors who simply want to live their lives alongside us in community. Thank you for listening to Alaskans' overwhelming opposition, and for the opportunity to testify.

Respectfully,

Ben Kellie

## Lindsey Causer

---

**From:** Victoria OConnell Curran [REDACTED]  
**Sent:** Thursday, April 13, 2023 7:51 PM  
**To:** House Education  
**Subject:** No on HB105

Below is my testimony from tonight's hearing. Thank you for the opportunity to testify.

My name is Victoria Curran from Sitka, representing myself. Thank you for the opportunity to speak against HB 105.

There has been so much great specific testimony against the bill already and I thank these testifiers.

I have lived in Alaska 40 years, raised two children here and have 2 grandchildren about to enter public schools.

Parents already have full control right now to opt out of any activity or class they do not support.

There are bathrooms that can already be used if anyone is uncomfortable sharing a bathroom with classmates.

By not allowing students to live their authentic selves at school, often the only safe space some children have, you would be increasing

the likelihood of self harm and suicide in transgender and other youth.

Alaska is already rated the LEAST HEALTHY state in terms of number of deaths by suicide per 100,000 adolescents ages 15-19.

Importantly, it makes ALL students unsafe by taking away important early sex education.

Child sexual assault in Alaska is almost six times the national average. (UAA Justice Center, 2015 survey)

and Kids Count reported to the Alaska Senate that Alaska ranked 41st for overall child well-being and 44th for health

As you must understand after public testimony this is a solution for a problem that does not exist and feels like

it is a show piece for a conservative national agenda to discriminate against LGBTQIA+ students.

Please do not pass this bill out of committee, it burdens teachers, administrators, increases the cost of education, and hurts all students.

I was shocked to hear the chair start tonight's hearing stating past testimony was either intentionally misleading or uninformed -

that statement is disappointing and not accurate – in this she did not show the public the same respect she asked of us tonight and that is a problem in a legislative public hearing. Are you really listening to us?

Thank you for the opportunity to speak.

([https://www.americashealthrankings.org/explore/health-of-women-and-children/measure/teen\\_suicide/state/AK](https://www.americashealthrankings.org/explore/health-of-women-and-children/measure/teen_suicide/state/AK))

--

Tory O'Connell Curran  
Grateful to live on LÍngít Aaní

# Sex Redefined: The Idea of 2 Sexes Is Overly Simplistic

Claire Ainsworth, Nature magazine  
18–23 minutes

---

As a clinical geneticist, Paul James is accustomed to discussing some of the most delicate issues with his patients. But in early 2010, he found himself having a particularly awkward conversation about sex.

A 46-year-old pregnant woman had visited his clinic at the Royal Melbourne Hospital in Australia to hear the results of an amniocentesis test to screen her baby's chromosomes for abnormalities. The baby was fine—but follow-up tests had revealed something astonishing about the mother. Her body was built of cells from two individuals, probably from twin embryos that had merged in her own mother's womb. And there was more. One set of cells carried two X chromosomes, the complement that typically makes a person female; the other had an X and a Y. Halfway through her fifth decade and pregnant with her third child, the woman learned for the first time that a large part of her body was chromosomally male. “That's kind of science-fiction material for someone who just came in for an amniocentesis,” says James.

Sex can be much more complicated than it at first seems. According to the simple scenario, the presence or absence of a Y chromosome is what counts: with it, you are male, and without it, you are female. But doctors have long known that some people straddle the boundary—their sex chromosomes say one thing, but their gonads (ovaries or testes) or sexual anatomy say another. Parents of children with these kinds of conditions—known as intersex conditions, or differences or disorders of sex development (DSDs)—often face difficult decisions about whether to bring up their child as a boy or a girl. Some researchers now say that as many as 1 person in 100 has some form of DSD.

When genetics is taken into consideration, the boundary between the sexes becomes even blurrier. Scientists have identified many of the genes involved in the main forms of DSD, and have uncovered variations in these genes that have subtle effects on a person's anatomical or physiological sex. What's more, new technologies in DNA sequencing and cell biology are revealing that almost everyone is, to varying degrees, a patchwork of genetically distinct cells, some with a sex that might not match that of the rest of their body. Some studies even suggest that the sex of each cell drives its behaviour, through a complicated network of molecular interactions. “I think there's much greater diversity within male or female, and there is certainly an area of overlap where some people can't easily define themselves within the binary structure,” says John Achermann, who studies sex development and endocrinology at University College London's Institute of Child Health.

These discoveries do not sit well in a world in which sex is still defined in binary terms. Few legal systems allow for any ambiguity in biological sex, and a person's legal rights and social status can be heavily influenced by whether their birth certificate says male or female.

“The main problem with a strong dichotomy is that there are intermediate cases that push the limits and ask us to figure out exactly where the dividing line is between males and females,” says Arthur Arnold at the University of California, Los Angeles, who studies biological sex differences. “And that's often a very difficult problem, because sex can be defined a number of ways.”

## The start of sex

That the two sexes are physically different is obvious, but at the start of life, it is not. Five weeks into development, a human embryo has the potential to form both male and female anatomy. Next to the developing kidneys, two bulges known as the gonadal ridges emerge alongside two pairs of ducts, one of which can form the uterus and Fallopian tubes, and the other the male internal genital plumbing: the epididymes, vas deferentia and seminal vesicles. At six weeks, the gonad switches on the developmental pathway to become an ovary or a testis. If a testis develops, it secretes testosterone, which supports the development of the male ducts. It also makes other hormones that force the presumptive uterus and Fallopian tubes to shrink away. If the gonad becomes an ovary, it makes oestrogen, and the lack of testosterone causes the male plumbing to wither. The sex hormones also dictate the development of the external genitalia, and they come into play once more at puberty, triggering the development of secondary sexual characteristics such as breasts or facial hair.

Changes to any of these processes can have dramatic effects on an individual's sex. Gene mutations affecting gonad development can result in a person with XY chromosomes developing typically female characteristics, whereas alterations in hormone signalling can cause XX individuals to develop along male lines.

For many years, scientists believed that female development was the default programme, and that male development was actively switched on by the presence of a particular gene on the Y chromosome. In 1990, researchers made headlines when they uncovered the identity of this gene, which they called *SRY*. Just by itself, this gene can switch the gonad from ovarian to testicular development. For example, XX individuals who carry a fragment of the Y chromosome that contains *SRY* develop as males.

By the turn of the millennium, however, the idea of femaleness being a passive default option had been toppled by the discovery of genes that actively promote ovarian development and suppress the testicular programme—such as one called *WNT4*. XY individuals with extra copies of this gene can develop atypical genitals and gonads, and a rudimentary uterus and Fallopian tubes. In 2011, researchers showed that if another key ovarian gene, *RSPO1*, is not working normally, it causes XX people to develop an ovotestis—a gonad with areas of both ovarian and testicular development.

These discoveries have pointed to a complex process of sex determination, in which the identity of the gonad emerges from a contest between two opposing networks of gene activity. Changes in the activity or amounts of molecules (such as WNT4) in the networks can tip the balance towards or away from the sex seemingly spelled out by the chromosomes. “It has been, in a sense, a philosophical change in our way of looking at sex; that it's a balance,” says Eric Vilain, a clinician and the director of the Center for Gender-Based Biology at the University of California, Los Angeles. “It's more of a systems-biology view of the world of sex.”

## Battle of the sexes

According to some scientists, that balance can shift long after development is over. Studies in mice suggest that the gonad teeters between being male and female throughout life, its identity requiring constant maintenance. In 2009, researchers reported deactivating an ovarian gene called *Foxl2* in adult female mice; they found that the granulosa cells that support the development of eggs transformed into Sertoli cells, which support sperm development. Two years later, a separate team showed the opposite: that inactivating a gene called *Dmrt1* could turn adult testicular cells into ovarian ones. “That was the big shock, the fact that it was going on post-natally,” says Vincent Harley, a geneticist who studies gonad development at the MIMR-PHI Institute for Medical Research in Melbourne.

The gonad is not the only source of diversity in sex. A number of DSDs are caused by changes in the machinery that responds to hormonal signals from the gonads and other glands. Complete androgen insensitivity syndrome, or CAIS, for example, arises when a person's cells are deaf to male sex hormones, usually because the receptors that respond to the hormones are not working. People with CAIS have Y chromosomes and internal testes, but their external genitalia are female, and they develop as females at puberty.

Conditions such as these meet the medical definition of DSDs, in which an individual's anatomical sex seems to be at odds with their chromosomal or gonadal sex. But they are rare—affecting about 1 in 4,500 people. Some researchers now say that the definition should be widened to include subtle variations of anatomy such as mild hypospadias, in which a man's urethral opening is on the underside of his penis rather than at the tip. The most inclusive definitions point to the figure of 1 in 100 people having some form of DSD, says Vilain.

But beyond this, there could be even more variation. Since the 1990s, researchers have identified more than 25 genes involved in DSDs, and next-generation DNA sequencing in the past few years has uncovered a wide range of variations in these genes that have mild effects on individuals, rather than causing DSDs. “Biologically, it's a spectrum,” says Vilain.

A DSD called congenital adrenal hyperplasia (CAH), for example, causes the body to produce excessive amounts of male sex hormones; XX individuals with this condition are born with ambiguous genitalia (an enlarged clitoris and fused labia that resemble a scrotum). It is usually caused by a severe deficiency in an enzyme called 21-hydroxylase. But women carrying mutations that result in a milder deficiency develop a 'non-classical' form of CAH, which affects about 1 in 1,000 individuals; they may have male-like facial and body hair, irregular periods or fertility problems—or they might have no obvious symptoms at all. Another gene, *NR5A1*, is

currently fascinating researchers because variations in it cause a wide range of effects, from underdeveloped gonads to mild hypospadias in men, and premature menopause in women.

Many people never discover their condition unless they seek help for infertility, or discover it through some other brush with medicine. Last year, for example, surgeons reported that they had been operating on a hernia in a man, when they discovered that he had a womb. The man was 70, and had fathered four children.

## Cellular sex

Studies of DSDs have shown that sex is no simple dichotomy. But things become even more complex when scientists zoom in to look at individual cells. The common assumption that every cell contains the same set of genes is untrue. Some people have mosaicism: they develop from a single fertilized egg but become a patchwork of cells with different genetic make-ups. This can happen when sex chromosomes are doled out unevenly between dividing cells during early embryonic development. For example, an embryo that starts off as XY can lose a Y chromosome from a subset of its cells. If most cells end up as XY, the result is a physically typical male, but if most cells are X, the result is a female with a condition called Turner's syndrome, which tends to result in restricted height and underdeveloped ovaries. This kind of mosaicism is rare, affecting about 1 in 15,000 people.

The effects of sex-chromosome mosaicism range from the prosaic to the extraordinary. A few cases have been documented in which a mosaic XXY embryo became a mix of two cell types—some with two X chromosomes and some with two Xs and a Y—and then split early in development. This results in 'identical' twins of different sexes.

There is a second way in which a person can end up with cells of different chromosomal sexes. James's patient was a chimaera: a person who develops from a mixture of two fertilized eggs, usually owing to a merger between embryonic twins in the womb. This kind of chimaerism resulting in a DSD is extremely rare, representing about 1% of all DSD cases.

Another form of chimaerism, however, is now known to be widespread. Termed microchimaerism, it happens when stem cells from a fetus cross the placenta into the mother's body, and vice versa. It was first identified in the early 1970s—but the big surprise came more than two decades later, when researchers discovered how long these crossover cells survive, even though they are foreign tissue that the body should, in theory, reject. A study in 1996 recorded women with fetal cells in their blood as many as 27 years after giving birth; another found that maternal cells remain in children up to adulthood. This type of work has further blurred the sex divide, because it means that men often carry cells from their mothers, and women who have been pregnant with a male fetus can carry a smattering of its discarded cells.

Microchimaeric cells have been found in many tissues. In 2012, for example, immunologist Lee Nelson and her team at the University of Washington in Seattle found XY cells in post-mortem samples of women's brains. The oldest woman carrying male DNA was 94 years old. Other studies have shown that these immigrant cells are not idle; they integrate into their new environment and acquire specialized functions, including (in mice at least) forming neurons in

the brain. But what is not known is how a peppering of male cells in a female, or vice versa, affects the health or characteristics of a tissue—for example, whether it makes the tissue more susceptible to diseases more common in the opposite sex. “I think that’s a great question,” says Nelson, “and it is essentially entirely unaddressed.” In terms of human behaviour, the consensus is that a few male microchimaeric cells in the brain seem unlikely to have a major effect on a woman.

Scientists are now finding that XX and XY cells behave in different ways, and that this can be independent of the action of sex hormones. “To tell you the truth, it’s actually kind of surprising how big an effect of sex chromosomes we’ve been able to see,” says Arnold. He and his colleagues have shown that the dose of X chromosomes in a mouse’s body can affect its metabolism, and studies in a lab dish suggest that XX and XY cells behave differently on a molecular level, for example with different metabolic responses to stress. The next challenge, says Arnold, is to uncover the mechanisms. His team is studying the handful of X-chromosome genes now known to be more active in females than in males. “I actually think that there are more sex differences than we know of,” says Arnold.

## **Beyond the binary**

Biologists may have been building a more nuanced view of sex, but society has yet to catch up. True, more than half a century of activism from members of the lesbian, gay, bisexual and transgender community has softened social attitudes to sexual orientation and gender. Many societies are now comfortable with men and women crossing conventional societal boundaries in their choice of appearance, career and sexual partner. But when it comes to sex, there is still intense social pressure to conform to the binary model.

This pressure has meant that people born with clear DSDs often undergo surgery to ‘normalize’ their genitals. Such surgery is controversial because it is usually performed on babies, who are too young to consent, and risks assigning a sex at odds with the child’s ultimate gender identity—their sense of their own gender. Intersex advocacy groups have therefore argued that doctors and parents should at least wait until a child is old enough to communicate their gender identity, which typically manifests around the age of three, or old enough to decide whether they want surgery at all.

This issue was brought into focus by a lawsuit filed in South Carolina in May 2013 by the adoptive parents of a child known as MC, who was born with ovotesticular DSD, a condition that produces ambiguous genitalia and gonads with both ovarian and testicular tissue. When MC was 16 months old, doctors performed surgery to assign the child as female—but MC, who is now eight years old, went on to develop a male gender identity. Because he was in state care at the time of his treatment, the lawsuit alleged not only that the surgery constituted medical malpractice, but also that the state denied him his constitutional right to bodily integrity and his right to reproduce. Last month, a court decision prevented the federal case from going to trial, but a state case is ongoing.

“This is potentially a critically important decision for children born with intersex traits,” says Julie Greenberg, a specialist in legal issues relating to gender and sex at Thomas Jefferson

School of Law in San Diego, California. The suit will hopefully encourage doctors in the United States to refrain from performing operations on infants with DSDs when there are questions about their medical necessity, she says. It could raise awareness about “the emotional and physical struggles intersex people are forced to endure because doctors wanted to 'help' us fit in,” says Georgiann Davis, a sociologist who studies issues surrounding intersex traits and gender at the University of Nevada, Las Vegas, who was born with CAIS.

Doctors and scientists are sympathetic to these concerns, but the MC case also makes some uneasy—because they know how much is still to be learned about the biology of sex. They think that changing medical practice by legal ruling is not ideal, and would like to see more data collected on outcomes such as quality of life and sexual function to help decide the best course of action for people with DSDs—something that researchers are starting to do.

Diagnoses of DSDs once relied on hormone tests, anatomical inspections and imaging, followed by painstaking tests of one gene at a time. Now, advances in genetic techniques mean that teams can analyse multiple genes at once, aiming straight for a genetic diagnosis and making the process less stressful for families. Vilain, for example, is using whole-exome sequencing—which sequences the protein-coding regions of a person's entire genome—on XY people with DSDs. Last year, his team showed that exome sequencing could offer a probable diagnosis in 35% of the study participants whose genetic cause had been unknown.

Vilain, Harley and Achermann say that doctors are taking an increasingly circumspect attitude to genital surgery. Children with DSDs are treated by multidisciplinary teams that aim to tailor management and support to each individual and their family, but this usually involves raising a child as male or female even if no surgery is done. Scientists and advocacy groups mostly agree on this, says Vilain: “It might be difficult for children to be raised in a gender that just does not exist out there.” In most countries, it is legally impossible to be anything but male or female.

Yet if biologists continue to show that sex is a spectrum, then society and state will have to grapple with the consequences, and work out where and how to draw the line. Many transgender and intersex activists dream of a world where a person's sex or gender is irrelevant. Although some governments are moving in this direction, Greenberg is pessimistic about the prospects of realizing this dream—in the United States, at least. “I think to get rid of gender markers altogether or to allow a third, indeterminate marker, is going to be difficult.”

So if the law requires that a person is male or female, should that sex be assigned by anatomy, hormones, cells or chromosomes, and what should be done if they clash? “My feeling is that since there is not one biological parameter that takes over every other parameter, at the end of the day, gender identity seems to be the most reasonable parameter,” says Vilain. In other words, if you want to know whether someone is male or female, it may be best just to ask.

*This article is reproduced with permission and was first published on February 18, 2015.*

**Lindsey Causer**

---

**From:** [REDACTED]  
**Sent:** Thursday, April 13, 2023 7:49 PM  
**To:** House Education  
**Cc:** Rep. Louise Stutes; LIO Kodiak  
**Subject:** RE: HB 105 Scientific American - Sex Redefined: The Idea of 2 Sexes Is Overly Simplistic  
**Attachments:** Scientific American - Sex Redefined- The Idea of 2 Sexes Is Overly Simplistic.docx

[scientificamerican.com](http://scientificamerican.com)

## Sex Redefined: The Idea of 2 Sexes Is Overly Simplistic

Claire Ainsworth, Nature magazine  
18–23 minutes

---

As a clinical geneticist, Paul James is accustomed to discussing some of the most delicate issues with his patients. But in early 2010, he found himself having a particularly awkward conversation about sex.

A 46-year-old pregnant woman had visited his clinic at the Royal Melbourne Hospital in Australia to hear the results of an amniocentesis test to screen her baby's chromosomes for abnormalities. The baby was fine—but follow-up tests had revealed something astonishing about the mother. Her body was built of cells from two individuals, probably from twin embryos that had merged in her own mother's womb. And there was more. One set of cells carried two X chromosomes, the complement that typically makes a person female; the other had an X and a Y. Halfway through her fifth decade and pregnant with her third child, the woman learned for the first time that a large part of her body was chromosomally male. "That's kind of science-fiction material for someone who just came in for an amniocentesis," says James.

Sex can be much more complicated than it at first seems. According to the simple scenario, the presence or absence of a Y chromosome is what counts: with it, you are male, and without it, you are female. But doctors have long known that some people straddle the boundary—their sex chromosomes say one thing, but their gonads (ovaries or testes) or sexual anatomy say another. Parents of children with these kinds of conditions—known as intersex conditions, or differences or disorders of sex development (DSDs)—often face difficult decisions about whether to bring up their child as a boy or a girl. Some researchers now say that as many as 1 person in 100 has some form of DSD.

When genetics is taken into consideration, the boundary between the sexes becomes even blurrier. Scientists have identified many of the genes involved in the main forms

of DSD, and have uncovered variations in these genes that have subtle effects on a person's anatomical or physiological sex. What's more, new technologies in DNA sequencing and cell biology are revealing that almost everyone is, to varying degrees, a patchwork of genetically distinct cells, some with a sex that might not match that of the rest of their body. Some studies even suggest that the sex of each cell drives its behaviour, through a complicated network of molecular interactions. "I think there's much greater diversity within male or female, and there is certainly an area of overlap where some people can't easily define themselves within the binary structure," says John Achermann, who studies sex development and endocrinology at University College London's Institute of Child Health.

These discoveries do not sit well in a world in which sex is still defined in binary terms. Few legal systems allow for any ambiguity in biological sex, and a person's legal rights and social status can be heavily influenced by whether their birth certificate says male or female.

"The main problem with a strong dichotomy is that there are intermediate cases that push the limits and ask us to figure out exactly where the dividing line is between males and females," says Arthur Arnold at the University of California, Los Angeles, who studies biological sex differences. "And that's often a very difficult problem, because sex can be defined a number of ways."

## The start of sex

That the two sexes are physically different is obvious, but at the start of life, it is not. Five weeks into development, a human embryo has the potential to form both male and female anatomy. Next to the developing kidneys, two bulges known as the gonadal ridges emerge alongside two pairs of ducts, one of which can form the uterus and Fallopian tubes, and the other the male internal genital plumbing: the epididymes, vas deferentia and seminal vesicles. At six weeks, the gonad switches on the developmental pathway to become an ovary or a testis. If a testis develops, it secretes testosterone, which supports the development of the male ducts. It also makes other hormones that force the presumptive uterus and Fallopian tubes to shrink away. If the gonad becomes an ovary, it makes oestrogen, and the lack of testosterone causes the male plumbing to wither. The sex hormones also dictate the development of the external genitalia, and they come into play once more at puberty, triggering the development of secondary sexual characteristics such as breasts or facial hair. Changes to any of these processes can have dramatic effects on an individual's sex. Gene mutations affecting gonad development can result in a person with XY chromosomes developing typically female characteristics, whereas alterations in hormone signalling can cause XX individuals to develop along male lines. For many years, scientists believed that female development was the default programme, and that male development was actively switched on by the presence of a particular gene on the Y chromosome. In 1990, researchers made headlines when they uncovered the identity of this gene, which they called *SRY*. Just by itself, this gene can switch the gonad from ovarian to testicular development. For example, XX

individuals who carry a fragment of the Y chromosome that contains *SRY* develop as males.

By the turn of the millennium, however, the idea of femaleness being a passive default option had been toppled by the discovery of genes that actively promote ovarian development and suppress the testicular programme—such as one called *WNT4*. XY individuals with extra copies of this gene can develop atypical genitals and gonads, and a rudimentary uterus and Fallopian tubes. In 2011, researchers showed that if another key ovarian gene, *RSPO1*, is not working normally, it causes XX people to develop an ovotestis—a gonad with areas of both ovarian and testicular development. These discoveries have pointed to a complex process of sex determination, in which the identity of the gonad emerges from a contest between two opposing networks of gene activity. Changes in the activity or amounts of molecules (such as *WNT4*) in the networks can tip the balance towards or away from the sex seemingly spelled out by the chromosomes. “It has been, in a sense, a philosophical change in our way of looking at sex; that it's a balance,” says Eric Vilain, a clinician and the director of the Center for Gender-Based Biology at the University of California, Los Angeles. “It's more of a systems-biology view of the world of sex.”

### **Battle of the sexes**

According to some scientists, that balance can shift long after development is over. Studies in mice suggest that the gonad teeters between being male and female throughout life, its identity requiring constant maintenance. In 2009, researchers reported deactivating an ovarian gene called *Foxl2* in adult female mice; they found that the granulosa cells that support the development of eggs transformed into Sertoli cells, which support sperm development. Two years later, a separate team showed the opposite: that inactivating a gene called *Dmrt1* could turn adult testicular cells into ovarian ones. “That was the big shock, the fact that it was going on post-natally,” says Vincent Harley, a geneticist who studies gonad development at the MIMR-PHI Institute for Medical Research in Melbourne.

The gonad is not the only source of diversity in sex. A number of DSDs are caused by changes in the machinery that responds to hormonal signals from the gonads and other glands. Complete androgen insensitivity syndrome, or CAIS, for example, arises when a person's cells are deaf to male sex hormones, usually because the receptors that respond to the hormones are not working. People with CAIS have Y chromosomes and internal testes, but their external genitalia are female, and they develop as females at puberty.

Conditions such as these meet the medical definition of DSDs, in which an individual's anatomical sex seems to be at odds with their chromosomal or gonadal sex. But they are rare—affecting about 1 in 4,500 people. Some researchers now say that the definition should be widened to include subtle variations of anatomy such as mild hypospadias, in which a man's urethral opening is on the underside of his penis rather than at the tip. The most inclusive definitions point to the figure of 1 in 100 people having some form of DSD, says Vilain.

But beyond this, there could be even more variation. Since the 1990s, researchers have identified more than 25 genes involved in DSDs, and next-generation DNA sequencing in the past few years has uncovered a wide range of variations in these genes that have mild effects on individuals, rather than causing DSDs. “Biologically, it's a spectrum,” says Vilain.

A DSD called congenital adrenal hyperplasia (CAH), for example, causes the body to produce excessive amounts of male sex hormones; XX individuals with this condition are born with ambiguous genitalia (an enlarged clitoris and fused labia that resemble a scrotum). It is usually caused by a severe deficiency in an enzyme called 21-hydroxylase. But women carrying mutations that result in a milder deficiency develop a 'non-classical' form of CAH, which affects about 1 in 1,000 individuals; they may have male-like facial and body hair, irregular periods or fertility problems—or they might have no obvious symptoms at all. Another gene, *NR5A1*, is currently fascinating researchers because variations in it cause a wide range of effects, from underdeveloped gonads to mild hypospadias in men, and premature menopause in women.

Many people never discover their condition unless they seek help for infertility, or discover it through some other brush with medicine. Last year, for example, surgeons reported that they had been operating on a hernia in a man, when they discovered that he had a womb. The man was 70, and had fathered four children.

## Cellular sex

Studies of DSDs have shown that sex is no simple dichotomy. But things become even more complex when scientists zoom in to look at individual cells. The common assumption that every cell contains the same set of genes is untrue. Some people have mosaicism: they develop from a single fertilized egg but become a patchwork of cells with different genetic make-ups. This can happen when sex chromosomes are doled out unevenly between dividing cells during early embryonic development. For example, an embryo that starts off as XY can lose a Y chromosome from a subset of its cells. If most cells end up as XY, the result is a physically typical male, but if most cells are X, the result is a female with a condition called Turner's syndrome, which tends to result in restricted height and underdeveloped ovaries. This kind of mosaicism is rare, affecting about 1 in 15,000 people.

The effects of sex-chromosome mosaicism range from the prosaic to the extraordinary. A few cases have been documented in which a mosaic XXY embryo became a mix of two cell types—some with two X chromosomes and some with two Xs and a Y—and then split early in development. This results in 'identical' twins of different sexes.

There is a second way in which a person can end up with cells of different chromosomal sexes. James's patient was a chimaera: a person who develops from a mixture of two fertilized eggs, usually owing to a merger between embryonic twins in the womb. This kind of chimaerism resulting in a DSD is extremely rare, representing about 1% of all DSD cases.

Another form of chimaerism, however, is now known to be widespread. Termed microchimaerism, it happens when stem cells from a fetus cross the placenta into the mother's body, and vice versa. It was first identified in the early 1970s—but the big surprise came more than two decades later, when researchers discovered how long these crossover cells survive, even though they are foreign tissue that the body should, in theory, reject. A study in 1996 recorded women with fetal cells in their blood as many as 27 years after giving birth; another found that maternal cells remain in children up to adulthood. This type of work has further blurred the sex divide, because it means that men often carry cells from their mothers, and women who have been pregnant with a male fetus can carry a smattering of its discarded cells.

Microchimaeric cells have been found in many tissues. In 2012, for example, immunologist Lee Nelson and her team at the University of Washington in Seattle found XY cells in post-mortem samples of women's brains. The oldest woman carrying male DNA was 94 years old. Other studies have shown that these immigrant cells are not idle; they integrate into their new environment and acquire specialized functions, including (in mice at least) forming neurons in the brain. But what is not known is how a peppering of male cells in a female, or vice versa, affects the health or characteristics of a tissue—for example, whether it makes the tissue more susceptible to diseases more common in the opposite sex. “I think that's a great question,” says Nelson, “and it is essentially entirely unaddressed.” In terms of human behaviour, the consensus is that a few male microchimaeric cells in the brain seem unlikely to have a major effect on a woman.

Scientists are now finding that XX and XY cells behave in different ways, and that this can be independent of the action of sex hormones. “To tell you the truth, it's actually kind of surprising how big an effect of sex chromosomes we've been able to see,” says Arnold. He and his colleagues have shown that the dose of X chromosomes in a mouse's body can affect its metabolism, and studies in a lab dish suggest that XX and XY cells behave differently on a molecular level, for example with different metabolic responses to stress. The next challenge, says Arnold, is to uncover the mechanisms. His team is studying the handful of X-chromosome genes now known to be more active in females than in males. “I actually think that there are more sex differences than we know of,” says Arnold.

## **Beyond the binary**

Biologists may have been building a more nuanced view of sex, but society has yet to catch up. True, more than half a century of activism from members of the lesbian, gay, bisexual and transgender community has softened social attitudes to sexual orientation and gender. Many societies are now comfortable with men and women crossing conventional societal boundaries in their choice of appearance, career and sexual partner. But when it comes to sex, there is still intense social pressure to conform to the binary model.

This pressure has meant that people born with clear DSDs often undergo surgery to 'normalize' their genitals. Such surgery is controversial because it is usually performed

on babies, who are too young to consent, and risks assigning a sex at odds with the child's ultimate gender identity—their sense of their own gender. Intersex advocacy groups have therefore argued that doctors and parents should at least wait until a child is old enough to communicate their gender identity, which typically manifests around the age of three, or old enough to decide whether they want surgery at all.

This issue was brought into focus by a lawsuit filed in South Carolina in May 2013 by the adoptive parents of a child known as MC, who was born with ovotesticular DSD, a condition that produces ambiguous genitalia and gonads with both ovarian and testicular tissue. When MC was 16 months old, doctors performed surgery to assign the child as female—but MC, who is now eight years old, went on to develop a male gender identity. Because he was in state care at the time of his treatment, the lawsuit alleged not only that the surgery constituted medical malpractice, but also that the state denied him his constitutional right to bodily integrity and his right to reproduce. Last month, a court decision prevented the federal case from going to trial, but a state case is ongoing.

“This is potentially a critically important decision for children born with intersex traits,” says Julie Greenberg, a specialist in legal issues relating to gender and sex at Thomas Jefferson School of Law in San Diego, California. The suit will hopefully encourage doctors in the United States to refrain from performing operations on infants with DSDs when there are questions about their medical necessity, she says. It could raise awareness about “the emotional and physical struggles intersex people are forced to endure because doctors wanted to ‘help’ us fit in,” says Georgiann Davis, a sociologist who studies issues surrounding intersex traits and gender at the University of Nevada, Las Vegas, who was born with CAIS.

Doctors and scientists are sympathetic to these concerns, but the MC case also makes some uneasy—because they know how much is still to be learned about the biology of sex. They think that changing medical practice by legal ruling is not ideal, and would like to see more data collected on outcomes such as quality of life and sexual function to help decide the best course of action for people with DSDs—something that researchers are starting to do.

Diagnoses of DSDs once relied on hormone tests, anatomical inspections and imaging, followed by painstaking tests of one gene at a time. Now, advances in genetic techniques mean that teams can analyse multiple genes at once, aiming straight for a genetic diagnosis and making the process less stressful for families. Vilain, for example, is using whole-exome sequencing—which sequences the protein-coding regions of a person's entire genome—on XY people with DSDs. Last year, his team showed that exome sequencing could offer a probable diagnosis in 35% of the study participants whose genetic cause had been unknown.

Vilain, Harley and Achermann say that doctors are taking an increasingly circumspect attitude to genital surgery. Children with DSDs are treated by multidisciplinary teams that aim to tailor management and support to each individual and their family, but this usually involves raising a child as male or female even if no surgery is done. Scientists and advocacy groups mostly agree on this, says Vilain: “It might be difficult for children

to be raised in a gender that just does not exist out there.” In most countries, it is legally impossible to be anything but male or female.

Yet if biologists continue to show that sex is a spectrum, then society and state will have to grapple with the consequences, and work out where and how to draw the line. Many transgender and intersex activists dream of a world where a person's sex or gender is irrelevant. Although some governments are moving in this direction, Greenberg is pessimistic about the prospects of realizing this dream—in the United States, at least. “I think to get rid of gender markers altogether or to allow a third, indeterminate marker, is going to be difficult.”

So if the law requires that a person is male or female, should that sex be assigned by anatomy, hormones, cells or chromosomes, and what should be done if they clash? “My feeling is that since there is not one biological parameter that takes over every other parameter, at the end of the day, gender identity seems to be the most reasonable parameter,” says Vilain. In other words, if you want to know whether someone is male or female, it may be best just to ask.

*This article is reproduced with permission and was first published on February 18, 2015.*

## Lindsey Causer

---

**From:** Louisa Cryan <[REDACTED]>  
**Sent:** Thursday, April 13, 2023 7:57 PM  
**To:** House Education  
**Subject:** HB 105 - Opposition

Hello,

My name is Louisa Cryan (she/her) and I live in Juneau, Alaska. I am writing to strongly oppose HB 105.

We should be protecting and supporting Alaska's children. And Alaska's educators. This bill does not support or help them. This bill is hateful

Please do not pass this bill.

Thank you.

## Lindsey Causer

---

**From:** Rachel Barton <[REDACTED]>  
**Sent:** Thursday, April 13, 2023 8:01 PM  
**To:** House Education  
**Subject:** HB105

To the House Education Committee

I want to add my voice to those in opposition to HB105. This bill would only make children less safe at school and at home.

So many of my fellow Alaskans have already eloquently explained why we don't want this bill. Please keep your government overreach out of our children's lives and our classrooms.

Sincerely,  
Rachel Barton  
Anchor Point Alaska

Sent from my iPhone

## Lindsey Causer

---

**From:** Jacob Sonneborn [REDACTED]  
**Sent:** Thursday, April 13, 2023 8:02 PM  
**To:** House Education  
**Subject:** HB 105

You are wasting our time and money with this crap. Do not pass this out of committee. And stop with the culture war BS.

That is all

TY

Jacob Sonneborn  
Alaskan

Sent from my iPhone

## Lindsey Causer

---

**From:** Terry Snyder [REDACTED]  
**Sent:** Thursday, April 13, 2023 8:05 PM  
**To:** House Education  
**Subject:** Opposition to HB 105

**I want to share my strong opposition to HB 105.**

Although I appreciate you giving the opportunity to hear from the chorus of opposition during public testimony on this bill it is evident it has little or no support of Alaskans.

There has already been too much valuable time wasted on this ill begotten piece of legislation. Let it lay on the committee floor and move on.

Respectfully,

Terry Snyder  
Palmer, Alaska

## Lindsey Causer

---

**From:** Varpu Feathers [REDACTED]  
**Sent:** Thursday, April 13, 2023 8:25 PM  
**To:** House Education  
**Subject:** I oppose HB105

Dear recipient,

I am a mother of a 7 year old student in Fairbanks, and I would like to voice opposition to HB 105 for multiple reasons:

- 1) I want my child to have the best sex education possible even if they forget to bring me the permission slip.
- 2) I want teachers to be able to talk about sex and gender with their students when need be.
- 3) I want my child and their friends to feel that school is a safe place for everybody.
- 4) I want the trans-phobic bullying of citizens through house bills to stop.

Thank you all for your service, and best wishes,  
--Varpu Lotvonen

## Lindsey Causer

---

**From:** kailey otten [REDACTED]  
**Sent:** Thursday, April 13, 2023 8:37 PM  
**To:** House Education  
**Subject:** OPPOSE HB 105

Hello,

I was unfortunately unable to call in tonight to testify, but I want to make sure you know that I am one of the many who vehemently oppose HB 105. As a current social work student finishing up my last few weeks of a year-long practicum at a middle school, I have worked with many students who would be directly harmed by the passage of this bill.

Schools and the precious students in them are not pawns in a political game. Passing this bill would not only absolutely harm our LGBTQ+ students, but would harm all students by showing them that school is no longer a safe place.

Please protect our kids and stop HB 105.

Thank you,

Kailey Otten  
Anchorage

## Lindsey Causer

---

**From:** Chava Aybby Schapira [REDACTED]  
**Sent:** Thursday, April 13, 2023 8:42 PM  
**To:** House Education  
**Subject:** EMAIL TESTIMONY for HB 105

I am writing to testify in OPPOSITION of HB 105.

I have been waiting to testify for several hours, and I am starting to worry I will not have the chance to do so. Below is the statement I prepared to give:

My name is Chava Schapira and I oppose this bill. I was born and raised in Alaska. I am an attorney. I am a Jew. I am queer. and I am heart broken by the actions of the legislature. It took quite literally one hundred calls into the number before I was able to get through— but I am here to testify because this is a life and death issue for the youth of alaska.

There is nothing in this bill that protects children, protects parents, or protects alaskans.

Queer and trans people have always existed. We will continue to exist despite these blatant attempts to erase us from the world.

We have seen how this really affects the world: this will create a culture of chaos, a shroud of fear, and encourage people to leave Alaska. Continued anti-lgbt legislation will discourage investment in Alaska. If the legislature actually wanted to help alaskans, they would guarantee food, housing, and healthcare to every young person in the state. Yet here we are, late on a Thursday evening, arguing about whether alaskan youth have deserve to be safe in schools.

They deserve more than just safety, they deserve dignity and respect.

We will not passively beg for our rights, we will continue to show up and demand that every queer and trans alaskan is guaranteed life and liberty. Thank you.

## Lindsey Causer

---

**From:** Melody Vidmar [REDACTED]  
**Sent:** Thursday, April 13, 2023 8:45 PM  
**To:** House Education  
**Subject:** HB105 - Public Testimony in Opposition

Chair Allard and Committee Members,

My name is Melody Vidmar, I'm a resident of Anchorage, and I'm writing on my own behalf. I'm submitting this written testimony to strongly oppose HB105. In addition to being a resident of Alaska, I also happen to be an attorney who routinely handles constitutional rights cases. HB105 is a draconian bill that raises serious concerns for Alaska youth's (1) right to privacy and (2) the equal protection guarantee, both enshrined in our state constitution. Requiring school officials to disclose confidential information about students' gender identity, which is indeed "outing them," violates this fundamental right to privacy and treats trans students as the "other". Revealing their sensitive information while protecting the sensitive information of cisgender students treats them differently than their peers — which does not sound like "equal" protection to me. This is not based on any alleged "misinformation" surrounding the bill, but my analysis of the bill's actual text.

More pragmatically, It's dangerous for our children. Even in 2023, many kids are not safe at home to come out to their families. If forcibly outed by schools, kids are at risk of being abused at home, kicked out, or ostracized by their loved ones. And while it's true that trans youth are at a higher risk of depression and suicide, longitudinal studies have shown this is due to social stigma and prejudice, and that when they are accepted and loved throughout key developmental periods in their lives, the rates of depression and suicide are on par with their cisgender straight peers. Meaning that if we treat the trans kids in our communities with acceptance and respect, we can drive these rates down and save lives. This bill would do just the opposite and perpetuate these harmful cycles of ostracization.

In closing, we have a LOT of problems in Alaska's schools. Allowing LGBTQ youth to go to school in peace is not one of them. Please do not pass HB105 out of committee.

Thank you,  
Melody Vidmar

[REDACTED]  
Anchorage, AK 99501

## Lindsey Causer

---

**From:** Laura M Forbes [REDACTED]  
**Sent:** Thursday, April 13, 2023 8:47 PM  
**To:** House Education  
**Subject:** HB 105

Dear House Education Committee,

I am writing to express my opposition to HB 105 as an individual and constituent in NE Anchorage. I am in opposition to the impact of this bill on Alaska's children and youth, as relates to the shift away from the already existing parental right to "opt out," to an "opt-in" policy of student access to age-appropriate sex and health education. In order to step down and, hopefully, one day eliminate the incredibly high rates of sexual violence and abuse committed against children and adults in our state, it seems clear that KNOWLEDGE about one's body, about sexual relationships, and about how to talk about sexual abuse and sexual violence is a powerful tool. I hope that all children have access to this knowledge, and grow into adults who will not perpetuate cycles of abuse and trauma in their own lives, and the lives of others.

I am also strongly opposed to state mandates about how transgender and gender non-conforming students, their teachers, school leaders and other trusted adults are required to move through their years of educational experience. I am in opposition to any legislation including language framing individual students as—in some way—unsafe people in their school communities. The logistics of the provisions in this bill related to the sex and gender identity of unique and individual students, are inhumane and unworkable at best, and catastrophic at worst when we consider the many contexts of Alaska's schools and communities. Educators are already mandated reporters of abuse and neglect; every school building and school district is unique in their facilities and staffing at the local level. Students who have been historically marginalized and made vulnerable within our systems because of a less common gender identity should have ACCESS to all the dignity, privacy, opportunity and care as any student who falls into a cisgender, heteronormative identity category. I do not believe this bill offers that access, and I believe implementation would—rather than bolster parental rights in any significant way—suppress the rights of children and educators in the school community to operate with thoughtful, compassionate intention, and with the greatest focus on a complete and excellent education for each and all students. The language in this bill strikes me as the injection of complication and distraction into our school communities, rather than any advancement of education, students, families or educators.

Thank you for your consideration,  
Laura Forbes  
Muldoon neighborhood, Anchorage

## Lindsey Causer

---

**From:** Carey Seward [REDACTED]  
**Sent:** Thursday, April 13, 2023 8:52 PM  
**To:** House Education  
**Subject:** Oppose HB 105

My name is Carey Seward, I live in Fairbanks & I oppose HB 105.

Thank you,  
Carey Seward

## Lindsey Causer

---

**From:** Anna Brawley [REDACTED]  
**Sent:** Thursday, April 13, 2023 8:55 PM  
**To:** House Education  
**Subject:** Testimony opposing HB 105

Hello,

Thank you again for the opportunity to testify. The text of my verbal testimony, provided by phone at the hearing on 4/13/23, is copied below.

Sincerely,  
Anna Brawley  
Anchorage (HD 16 & SD H, West Anchorage)

---

My name is Anna Brawley, Anchorage resident, speaking as an individual. First time caller.

I strongly oppose HB 105. I oppose this bill for many reasons, but I will speak to two points:

First, this bill is framed as supporting parents' rights. We also need to protect children's rights. According to the Alaska Constitution, Article 1: "**All** persons have the natural right to life, liberty, and the pursuit of happiness." And "**All** persons are equal and entitled to equal rights, opportunities, and protection under the law." Furthermore, the Alaska Constitution states: "The right of the people to privacy is recognized **shall** not be infringed."

Children are also people. It is a parent's choice if they feel it is appropriate to snoop in a child's diary or phone history, which is also a violation of privacy. But Constitutional violations of young Alaskans' privacy should **not** be enshrined in State law.

Second, setting aside the content of this bill, I object to using the Legislature's limited, valuable time on this divisive legislation. Each year, as mandated in State law, there are a finite number of Legislative session hours from beginning to end. The opportunity cost of every hour spent on this bill is, it is an hour **not** spent on the real and urgent budget issues facing every school district in the state. The Legislature, and House Education Committee in particular, should focus on your constituents' priorities: finding ways to adequately fund our education system, and stopping the bleeding of outmigration of teachers, families, and young adults because of our continued lack of political will to fund the services people expect from our State government and local school districts.

In short: this bill is an unconstitutional waste of time.

Thank you for the opportunity to testify. Do not move this bill out of committee.

## Lindsey Causer

---

**From:** Alex Petkanas [REDACTED]  
**Sent:** Thursday, April 13, 2023 8:56 PM  
**To:** House Education  
**Subject:** Testimony HB 105

I am submitting in writing the testimony I delivered tonight on the phone.

My name is Alex Petkanas and I live in Anchorage on Dena'ina land. First I want to acknowledge that Alaska is home to many diverse Indigenous cultures and communities who have stewarded these lands long before contact, and people beyond a binary concept of gender have existed here long before us.

After hearing testimony a few weeks ago and tonight, you already know this bill is wildly unpopular. In fact, new research shows that these legislative attacks on queer and trans people across the country are unpopular on BOTH sides of the aisle - with 78% of Alaskans supporting LGBTQ+ people.

In addition to being unpopular, this bill is dangerous. It is dangerous because it limits access to essential sex education information, and because it will isolate trans and queer youth, placing them at higher risk of suicide. One testifier claimed that this risk is exaggerated - but LGBTQ youth are more than four times as likely to attempt suicide than their peers. More than 1.8 million LGBTQ youth seriously consider suicide each year in the U.S. — and at least one attempts suicide every 45 seconds. The death of trans children is a real and unacceptable outcome of this bill.

Members of this committee, I implore you to let this bill die, instead of letting children die.

--

Alex Petkanas  
Pronouns: he/him or they/them

## Lindsey Causer

---

**From:** [REDACTED]  
**Sent:** Thursday, April 13, 2023 8:58 PM  
**To:** House Education  
**Subject:** HB 105

Committee members,

After attempting to call in but discovering that I was #90 in line to testify, I gave up. Please accept the below as my testimony.

My name is Deborah Fancher. I was a science teacher in Anchorage for over 25 years. I taught chemistry and biology. This included teaching about human systems and reproduction. Before teaching the unit on human reproduction we were required to send home a notice, and parents could not only remove their student from class but attend class as well. As indicated by Andy Holleman, House Bill 105 does have some good parts however, it has some bad ones as well. It needs to be "reworked" and should be opposed as written.

First, an observation. Every teacher and school board member that I have listened to oppose this bill. It is ironic to me that parents who have testified seem to think that teachers are keeping something secret from them. Our curriculum is open. Our classrooms are open. We beg for volunteers. Yet some think teachers are keeping things from them. There are bad teachers, bad police officers and bad pastors. Most are not and they want to do what is best for the folks they serve. How many of us have taken a call from our kids because they have forgot a permission slip for a field trip, a lunch, or clothes for PE? Think how difficult it will be to get permission slips turned in for human reproduction class. Think about students whose only sex education comes from television and social media. Think of the impacts on teen pregnancy and STD transmission. Think of the students who will arrive at college not knowing a thing about human reproduction except what they have seen on TV.

This is bad for teachers, bad for kids and bad for our community. Send it back to be "reworked."

Thank you for taking testimony late into the night.

Deb Fancher

## Lindsey Causer

---

**From:** Ian Smith [REDACTED]  
**Sent:** Thursday, April 13, 2023 9:04 PM  
**To:** House Education  
**Subject:** Opposition to HB 105

Good evening,

I am writing today to voice my opposition to HB 105. It is legislative overreach, to be sure, and a waste of our legislature's time to be discussing a bill to prevent gender minorities from expressing their honest self-appraisal (e.g. pronoun choice)

I was a gender-queer and pansexual child in the eighties and nineties and benefitted from the ability to find similar peers and adults to form community and socially grow.

I hope that you will consider how it would feel if you yourself were persecuted for some harmless yet essential characteristic of yourselves before voting on this hurtful and oppressive bill, and vote it down.

Thank you for your time.

Ian R Smith  
Anchorage, AK

## Lindsey Causer

---

**From:** [REDACTED] on behalf of Valerie Brooks  
[REDACTED]  
**Sent:** Thursday, April 13, 2023 9:15 PM  
**To:** House Education  
**Subject:** Please Pass HB 99/SB108: LGBTQ+ Equality and Oppose HB 105/SB96

Dear Alaska House Education Committee,

Please pass HB 99/SB 108: LGBTQ+ Equality and oppose HB 105/SB96, Governor Dunleavy's attack on LGBTQ+ youth.

LGBTQ+ Alaskans deserve equality, period. LGBTQ+ Alaskans are our friends, neighbors, family, and coworkers. When it comes to being able to earn a living, having a place to live, or being served by a business or government office, they should be treated like anyone else and not be discriminated against.

I urge you to pass HB 99/SB108: LGBTQ+ Equality.

Governor Dunleavy's HB 105/SB96 is an attack on LGBTQ+ youth and will undoubtedly increase bullying, harassment, and stigmatization towards trans students in particular. Through this bill, Dunleavy is attacking Alaska students' sense of safety, making it extremely difficult for LGBTQ+ kids to live healthy and safe lives. All kids deserve to be safe at school. Trans youth should be treated with dignity and respect and should have the opportunity to live a healthy life.

To protect all students' privacy and health, I urge you to oppose HB 105/SB96.

Thank you for your time.

Sincerely,  
Dr. Valerie Brooks

[REDACTED] Ketchikan, AK 99901-5734 [REDACTED]

## Lindsey Causer

---

**From:** [REDACTED]  
**Sent:** Thursday, April 13, 2023 9:21 PM  
**To:** House Education  
**Subject:** Oppose HB 105

To the House Education Committee Members,

I am writing to ask you to focus on worthwhile issues, like increasing the BSA, instead of wasting time on deeply unpopular and harmful legislation like HB 105.

I do not support HB 105 and I hope you don't either.

Thank you,  
Mélisa Babb  
[REDACTED]  
Anchorage, AK 99517

## Lindsey Causer

---

**From:** Sydney Mullen [REDACTED]  
**Sent:** Thursday, April 13, 2023 9:29 PM  
**To:** House Education  
**Subject:** I oppose HB 105

My name is Dr. Sydney Brannoch, writing on behalf of myself, from my home in Fairbanks, Alaska.

I was on the phone earlier this evening to testify, but unfortunately the line dropped and I was unable to get through again.

I strongly oppose HB 105. I oppose this legislation because it is anti-sex education and anti-LGBTQ+ while, in my opinion, masquerading as “parental rights” in education.

This legislation dismisses gender diversity and gender identity and will undoubtedly “out” Alaskan youth to their parents and guardians. By forcing teachers to request parental permission to call students by their preferred names and pronouns, regardless of the purported intent behind the bill, in so doing, students are necessarily being “outed” to parents, which can be extremely harmful, if not outright dangerous, if these kids live in unsupportive homes.

Furthermore, age-appropriate sex education is crucial in keeping kids safe. There have been many studies that demonstrate that sex education reduces the rates of risky sexual behaviors, STIs, and unintentional pregnancies.

As a mother to two young kids, I want them (and all children) and I have access to a welcoming, safe, and pro-education school environment.

Members of the committee, please vote NO on HB105.

Thank you for your time and your service,  
Sydney Brannoch

## Lindsey Causer

---

**From:** Layla Lesley [REDACTED]  
**Sent:** Thursday, April 13, 2023 9:35 PM  
**To:** House Education  
**Subject:** No on hb105

Layla Lesley  
Wasilla  
Self Affiliated

No for all of the reasons given this evening in opposition of hb105.

Quit legislating harm to teachers and children.

Sent via the Samsung Galaxy S9+, an AT&T 5G Evolution capable smartphone

## Lindsey Causer

---

**From:** Electra Gardinier [REDACTED]  
**Sent:** Thursday, April 13, 2023 9:36 PM  
**To:** House Education  
**Subject:** Oppose HB 105

Hello Education Committee:

Thank you for your service to our state. I strongly oppose HB 105. I write from Lingit Aani. I am a teacher and parent from Juneau - I'm writing on my own behalf. I have a BA in Women's and Gender Studies and MA in Secondary Education. Our state is already extremely unsafe for children and this bill will only increase danger for some of our most vulnerable students. We must protect our LGBTQIA students. Outing our students when they are not ready will make their life more dangerous. I wish all homes were safe for our children, but we know that with the highest rates of child abuse and domestic violence in the nation, that there are some parents who hurt their children in this state. We report abuse constantly, but OCS is overwhelmed. Many of my high school students are homeless. Many of those students are part of the LGBTQIA community. We need to protect all students. In regards to curriculum - Gender studies means teaching students about suffrage, civil rights, and many current events - it is shameful to think that teachers might not be allowed to teach about topics that are deeply rooted in our own history as a state (the legacy Elizabeth Peratrovich = Gender studies). This bill will hurt Alaskans, please oppose HB 105.

Thank you,  
Electra Gardinier

## Lindsey Causer

---

**From:** Imullen06 [REDACTED]  
**Sent:** Thursday, April 13, 2023 9:39 PM  
**To:** House Education  
**Subject:** I oppose HB 105

Members of the committee,

My name is Logan Mullen of Fairbanks, Alaska, and I am writing on behalf of myself.

I vehemently oppose HB 105. This legislation does not protect the rights of Alaska's youth and is harmful in many respects. HB 105 has many dangerous implications and will put not only LGBTQ+ students in potentially harmful circumstances, but it also could easily lead to frivolous lawsuits against teachers and school administrations. Additionally, this legislation is anti-sex education in that students might not have access to critical information on their bodies, consent, bodily processes, and safe sex.

Please vote against HB 105.

Thank you,  
Logan Mullen

--

Logan Mullen  
M.S. Biology

## Lindsey Causer

---

**From:** [REDACTED] on behalf of Phoebe Autry  
[REDACTED]  
**Sent:** Thursday, April 13, 2023 9:49 PM  
**To:** House Education  
**Subject:** Please Pass HB 99/SB108: LGBTQ+ Equality and Oppose HB 105/SB96

Dear Alaska House Education Committee,

Please pass HB 99/SB 108: LGBTQ+ Equality and oppose HB 105/SB96, Governor Dunleavy's attack on LGBTQ+ youth.

LGBTQ+ Alaskans deserve equality, period. LGBTQ+ Alaskans are our friends, neighbors, family, and coworkers. When it comes to being able to earn a living, having a place to live, or being served by a business or government office, they should be treated like anyone else and not be discriminated against.

I urge you to pass HB 99/SB108: LGBTQ+ Equality.

Governor Dunleavy's HB 105/SB96 is an attack on LGBTQ+ youth and will undoubtedly increase bullying, harassment, and stigmatization towards trans students in particular. Through this bill, Dunleavy is attacking Alaska students' sense of safety, making it extremely difficult for LGBTQ+ kids to live healthy and safe lives. All kids deserve to be safe at school. Trans youth should be treated with dignity and respect and should have the opportunity to live a healthy life.

To protect all students' privacy and health, I urge you to oppose HB 105/SB96.

Thank you for your time.

Sincerely,  
Ms. Phoebe Autry

[REDACTED] Palmer, AK 99645-8857 [REDACTED]

## Lindsey Causer

---

**From:** Claire Todd [REDACTED]  
**Sent:** Thursday, April 13, 2023 10:12 PM  
**To:** House Education  
**Subject:** HB105 Opposition

Hi Alaska Education Committee,

My name is Claire Todd and I'm testifying on behalf of myself.

I'm a lifelong Alaskan and I strongly oppose HB 105.

I strongly oppose many aspects of this bill. However, I would like to focus on the access to sexual health. Changing the already opt out system to an opt in system will create an unnecessary barrier. Alaska's rate of interpersonal violence, sexual violence, and sexually transmitted infections speak to a great need for sexual education and discussions about healthy relationships. Please do not make it harder for students to get this very necessary education.

Please do not move forward with HB 105. This bill will not make schools more safe, but it will make schools more dangerous for trans youth.

I hope that my voice is heard. I've waited 2.5 hours on the phone, but have not yet been called on to speak.

Thank you,  
Claire

## Lindsey Causer

---

**From:** Ashley Arezou Minaei [REDACTED]  
**Sent:** Thursday, April 13, 2023 10:28 PM  
**To:** House Education  
**Subject:** HB 105 Opposition

Hello my name is Ashley Minaei and I am writing on behalf of myself and my three children in opposition to HB 105. I was born and raised in Anchorage. My mom taught with the Anchorage School District for 36 years before her retirement. I am a proud product of the Anchorage School District and a proud Anchorage School District parent.

This bill is a poorly masked agenda to suppress LGBTQI+ people and voices from our communities. This is not about parental rights. The writers of this bill have disguised this bill to convince people it is about parental rights. This is an attempt to take advantage of busy parents who do not have time to read the fine details that are hidden under the facade.

Switching from opt-out to opt-in will place an unnecessary burden on our already strained public schools and ultimately lead to many students missing out on important health education they may not receive elsewhere. Public health data can show us that opt-in language and policies decrease the efficacy and reliability of public health interventions, and increase the administrative burden on those tasked to fulfil the policies.

Sex education is health education. And age appropriate health education needs to start in kindergarten and increase in completeness with the age of the children. Children and youth need access to more - not less - accurate health education.

For the families who are worried about being involved in their children's lives - this is likely because they already are involved in their children's lives. That is wonderful. I encourage them to continue providing loving, stable, involved parental guidance to their children. This bill is not about them. Many children are not fortunate enough to have parents who fit these descriptions - those are the children who need to be protected from this bill and the lawmakers who wrote this bill.

I do not want others' religious and political beliefs to dictate my children's education. I want my children's education determined by education experts who have specific training and education on how and what to teach.

Thank you for your time,  
Ashley Minaei  
Anchorage, Alaska

---

**Ashley Arezou Minaei, MPH, CPH** (She/Her/Hers)

[REDACTED] || Cellular: [REDACTED]

*Dena'inaq elnen'ag' gheshtnu ch'q'u yesbdu. | I live and work on the land of the Dena'ina. (Translation by Sondra Shaginoff-Stuart and Joel Isaak)*