

So again welcome. This is the preventing injuries in children with autism.

And it is sponsored by the children's safety network. I do want to thank our funding sponsor for this. That is a health Resources and Service administration of the Department of Health and Human Services.

So we appreciate their support and their. Continued support in these types of webinars for all of you. Next slide. I'm gonna hand this over. There's a few technical announcements to make. So before I introduce the speakers.

I'm gonna hand it over to Kristen.

Hello, everyone. Thank you for joining us today, if you can. It's best to join audio via your computer. And if you do experience any audio issues. You can dial a phone number found in a zoom invitation and mute your computer speakers.

You are muted, and you will remain muted for the remainder of the webinar. If you do have any questions, you can use the QA. Button.

Found at the bottom of your screen to go ahead and ask those at any time throughout the webinar we will have a.

Portion at the end, where those questions will be answered. This session is being recorded, and we will post the recording along with these slides.

To our website within one week of today. If you need to use closed captions, you can view those by clicking the CC. Button at the bottom of your zoom screen.

And any resource files and links will be shared in the chat to all of you, if necessary.

And now I'm going to hand it back over to Judy. Great thanks. Kristen. Alright, everybody! I just wanted to introduce myself. I'm Judy Walters. I'm your moderator for today, and I'm the director of the Division of injury prevention at the centers for Disease Control.

And I'm an active member of the Child Safety Network Alliance. So I wanna welcome our presenters. And introduce them to you. We have 3 great speakers for you today. Dr. Sarah Tinker is an epidemiologist or an health scientist.

And senior scientists in the child Development and Disability branch at the Cdc. And in this role. To play around scientific support, to research, surveillance and programmatic activities, focus on serving the needs of children with developmental disabilities and their families throughout their lifespan.

Mrika Harris is a health scientist in the division of injury, prevention. At Cdc's National Center for Injury Prevention and control.

And she works to preventing deaths with research focused on drowning prevention in children and autism.

And finally jarping chen. Is an assistant professor at Uml, Department of Psychology.

And as director of the Uml pediatric Injury research lab. Dr. Chen's research focuses on reducing injury, related health and healthcare disparities among neurodiverse children and adolescents.

And of course, when you see on screen, you see, Dr. Yang, she helped to put together this presentation today, but unfortunately could not be with us.

So with that. I'm gonna hand it over to Sarah to kick us off.

Thanks so much, Judy. I'm gonna start the presentation by just giving a quick overview of autism, spectrum disorder.

Next slide. So autism, spectrum disorder. Go ahead and click one more sorry.

Is a developmental disorder that's characterized by deficits in social interaction and communication.

And the presence of restricted and repetitive behaviors. Click. Diagnosis is a multi-step process.

There is no single medical test that can definitively.

And it's a fairly complex process. Where clinicians look at developmental history and behavior in order to achieve a diagnosis.

And next one more. There we go! So there is. Sorry. Back there we go. So there is no one cause of autism.

It. There are a few environmental risk factors and genetic risk factors that are known but largely the causes are unknown, and it's thought that it's probably a combination of environmental and genetic.

Factors. Now next slide, please. So the prevalence of autism in the United States the most recent estimate is one in 36 or 2.8%.

Of 8 year old children. And that was using data from 2020. This estimate, which is probably the most quoted estimate that's given is based on tracking within 11 communities.

That are part of Cdc's autism and developmental disabilities, monitoring or Adam Network.

Next slide, please. And as you may have heard, or be aware, the prevalence of autism has been increasing over time.

So this plot shows data from Adam over the past few years, and it shows that there has been a fairly dramatic increase over time. We think this is almost certainly due to increased recognition of the condition and diagnosis. Of typically children with with a little bit milder symptoms, and that that is what's leading to this increase over time.

Next slide, please. And click.

So autism can be diagnosed by age 2 years. But.

Click, diagnosis typically occurs later. And it can depend on many factors.

The average age is a tricky statistic to look at, because

There's so many adults who are now being diagnosed for the 1st time that it can make it look like there haven't been.

Advances in early diagnosis. But really, that's what we're seeing. So if you click one more time.

We've started to look at cumulative incidents of diagnosis that we can get a handle on when kids are being diagnosed, and we see that they really are being diagnosed earlier. So.

Children in the blue the 4 year old Age group. They they are more likely to to be diagnosed earlier. So that's a good thing. Earlier diagnosis.

Is better for helping to support these kids with autism and their families.

And next slide. Please. Thank you. Asd is. 4 4 times more common among.

Voice relative to girls. So using those same 20 atom network data.

We saw a 1.1 prevalence of autism among 8 year old girls, and a 4.3 prevalence among boys so definitely much higher in boys.

Next slide, please. And I think it's important. Everyone understands that.

Autism affects children of all races and ethnicities. So initially, it used to be. We saw big disparity and identification of kids with autism, and it was much more prevalent in white children. But this trend we've seen a real change in it over the last few years.

And now you can see the prevalences are pretty similar, and even higher among some of the. Some of the minority groups. And and we think this is probably a positive sign that it means that these groups are getting better access to diagnostic.

Services, which is, you know, of course, the 1st step in in getting the services that they need.

Next slide, please. So many people with autism also have intellectual disability. It is not portrait. Of the condition. But it is an important Co-occurring condition.

And. Some people can use it. To to give an idea of, of quote unquote severity of autism, because we don't really have standardized or meaningful measures of severity.

So in the Adam data. IQ. Was missing for about a 3rd of kids, but among the kids.

But the 2 thirds of kids. For whom we had id data.

We saw that about a 3rd had IQ less than 70, so we would consider that to be an intellectual disability.

And then about a quarter had IQ in the in the borderline range. So that's just something important to keep in mind with this population.

And then the next slide. Please.

So profound autism is a more recent and highly debated concept that is trying to capture a meaningful distinction between people.

On the autism spectrum who might need more support. So this is defined. As being non verbal, or having an IQ less than 50.

The reason why it might be important to identify children with these with autism, with these additional characteristics.

Is that this group has been shown to be more likely to have self interest, behavior, have absolute epilepsy, and require around the clock supervision.

An estimate using 2,000 to 2016 network data. Estimated that about a quarter of kids with of 8 year olds with autism would be considered to have profound autism.

In addition to these descriptors of kind of the severity of autism. It's also important to know.

That there are a lot of other conditions that more commonly Co. Occur among kids with autism.

So they are 4 times more likely to have hearing problems. 7 times where I could have vision problems.

7 times more likely to have language, delay. 10 times more likely to have Adhd.

And 14 times more likely to have motor delay in this particular study was among kids 2 to 5 years of age.

Next slide, please. So. Why this all is important to think about in terms of.

Risk for injuries is that one particular characteristic that we see a lot in children with autism is wandering or elopement.

And this is defined as leaving a safe area or responsible caregiver. And it typically involves situations where a person may be injured or harmed. As a result.

The wandering. So children with autism may have challenges, understanding issues and communicating with others.

Next slide, please. So data from a Cdc study called the study to explore early development or seed looked at wandering again, this would be among 2 to 5 year old children.

And found that, compared to the general population.

That children with. Parents of children with autism much more frequently reported wandering of their child. So 60%.

Versus about 12, and then, when asked about frequent wandering, so not just the occasional loss of the grocery store, but something that is a frequent occurrence. It was reported by about quarter.

Of the parents of of young children with autism, you know only a small percentage to the general population. Parents.

Next slide. So another study. Or actually, this is the same study. Compared to a population children without developmental disabilities.

Including wandering, was 3 point times more likely among children with autism.

But also 3 times more likely among children with attention, deficit and hyperactivity problems, and 2.5 times more likely among children with.

Very low developmental level. So something more common in kids with autism, but also something to. To think about with kids, with all sorts of different developmental disabilities.

Next slide. So this is the different study, and it is a little bit older than I would prefer. But data from a parent of children with autism, aged 4 to 17 years.

Showed can you go ahead and click! There we go, that 53 of children. Who eloped.

We're missing for long enough to cause concern. 29. Of parents reported that their child attempted to elope multiple times per day.

And 35% of parents reported that their child attempted to elope multiple times per week.

And when the children were missing it wasn't for short amount of times. The average was 41.5 min. You can imagine that's.

Very stressful for these parents, and puts the children in a dangerous situation.

And then the last stat I think I'll present is the data from that same survey showed that when there were close calls among children, with autism, who eloped 65% of the time.

There was a close call with a traffic and 25 or 24% of the time it was risk for drowning. So those, you know definitely, those are the things we want to be paying attention to with

This issue. I did want to just quickly point out that it's not just autism.

That can be associated with increased risk for injury. For example, Adhd is characteristics where their trouble, paying attention and or controlling impulsive behaviors which can lead to careless mistakes or unnecessary risks, and having a hard time resisting temptation.

Adhd is very common, much more common than autism with the estimate around 10%.

Of children 3 to 17 years. Data have shown that it's associated with increased mortality and particularly accident and injury. Mortality.

So the implications are that children with autism may be at increased risk for drowning other injuries due to wandering behavior and symptoms of co-occurring conditions.

And data to understand the potentially unique risk. Factors for injuries among children with autism are critical. But backing. And this information will be important to inform prevention efforts in the future.

Okay. Well, thank you, Sarah, and. We're going to have time for questions after all the speakers talk. I do want to remind folks to put your questions in the Q. And a. Throughout, though, as they as they arise, so we can keep, and we will get to them at the end.

So our next speaker again is Sharika Harris will be talking to us about unintentional drowning deaths. So, Sharika, back to you.

Good afternoon, everyone. Today I'll be talking about unintentional deaths among children and adolescents.

With Asd in the Us. 1999 to 22.

Next slide. So when looking at drowning in the United States for all ages. Over 4,500 fatal deaths, and over 8,000 none found none. Fatal deaths occur each year, when, looking at children less than 18 there are over 800 fatal droning deaths and over 6,000 fatal droning deaths each year.

And drowning is the leading cause of death among children 4 years of age. Next slide.

So drowning locations vary by age group for infants. Less than one. It typically occurs in bathtubs, children, one to 4 home swimming pools.

And people, 15 and older natural waters. Next slide.

So for this slide I want present the statra already presented that. But I would just want to reiterate that there's an increased routing risk.

Among children with Asd, and we don't know why children with Asd are more susceptible to running than others.

Next slide. So I'm gonna talk about some of the characteristics of unintentional death in children with Asd.

There is this one study that analyze news articles in the Us. From January 2,000 to May 2,017, and in this study there were 23 fatal unintentional drownings for children 3 to 14 years old.

And the most frequent locations were ponds, followed by rivers and lakes that were in close proximity to the victims. Home.

And wondering. Let's and most of the drownings accounting for 74%. Next slide.

So the objective of this study was to explore unintentional drowning deaths in the Us. Among children and adolescents.

Where Asd was identified as a contributing cause of death on the death certificate. Next slide.

So for this study we use data from the national Vital Statistics system for 1999 to 2022, and we included adolescents within 20. The Icd codes that we use for the study are listed.

On the slide, and we also calculated descriptive statistics.

Next slide. So for our study, the total sample. There were 25,000.

492, and we're Asd was listed as a contributing cause of death. There were 114 drownings accounting for.

Next slide. So now I'm gonna present some of the results from our study. So when we were looking at this, compare by 6.

Where Asd was a contributing cause of death's accounting for most drowning, representing 82.5.

And then in a total sample Asd is also represented most of the drownings.

Next slide.

So when looking at the drownings by age, group. We found that children, aged 5 to 9, accounted for almost half 46.5.

Of the drowning deaths where Asd was listed as the contributing cause, when looking at the total sample.

Children, one to 4, accounted for. Most of the deaths 41.9 follow children, age 15 to 19 years old.

Next slide. So when looking at the Johnny Depp region, where Asc. Was a contributing factor, they most frequently occurred in the South.

Followed by the midwest, and then, when looking at the total sample. The drowning does most frequently occur in the South.

Followed by the list. Next slide.

So when looking at Johnnings, by the by, the water body type.

So where Asd was a contributing cause of death, they most frequently occurred in natural waters, followed by.

Bathtubs and ponds. But then, when looking at the total sample for Johnny Depp, we found that.

The Johnny Depp's most typically occurred in the pool. Natural water. Next slide.

So next, I'm gonna talk about some of the limitations for our study. So diagnosis of Asd often occurs after age 4. And this may explain some of the higher percentage of percentages of drowning deaths occurring after age 4, and due to limitations with the death certificate data, the number of children and adolescents.

With Asc. Who fatally drown, is like likely to be underestimated in this study, and we also want to point out that this data may not capture all drawings among children with Asd, only those for which it was listed as a contributing cause.

Next slide. So in summary for this study, we found that children, 5 to 9 years of age, accounted for almost half of the drawn with Asd listed as a contributing call from the death certificate.

And most Johnny does a. Among children with Asd. Frequently occurred in natural waters, followed by bath tubs and swimming pools.

Next slide. So next I would talk about some of the prevention that can be.

Methods that can be used. You can learn. You can do things such as learning to swim and water safety.

Build and maintain density, supervise closely where a life jacket and avoid alcohol. Next slide.

And some additional tactics. You can learn. Cbr. The risk of natural water. Use the buddy system, take precautions for medical conditions, and don't hyper ventilate for caregivers of kids with Asd. It is also important to be aware of the drawing with risk and be extra vigilant when around water.

Next slide. So I wanna share that we have been working with community partners to improve swimming and water safety skills among children with Asd.

So in 2023, the 24, we partner with the Y.M.C.A. To adapt a basic swimming and water safety skill training program for children with Asd, and the goal of this study was to increase access, to swim lessons for children with Asc and to evaluate the swim skills generated through lesson delivery.

Next slide. And so I will give an overview of our Ymc autism skills project.

So with this project, we had 9 Y.M.C.A. Associations ranging in size from one community center to 20 centers.

So each Y.M.C.A. Provided swim training to 50 youth with Asd. And there were 8 sessions each were 30 to 40 min with where they taught safety around water.

And all lessons were taught by certified swim instructors who were provided with additional training and assessment tools to test their lessons.

Pre, and post wims skills. Assessment data is being collected on each tile.

And all local Y projected a survey about their experience, working on this project and using the assessment tools.

And our data collection and evaluation will be completed next Wednesday. July 31.st And we're we are really looking forward to the results of this study.

Next slide. So I'm gonna present some of like the preliminary preliminary qualitative findings from our Y.M.C.A. Project.

So the feedback and interest by parents indicate a need for swim and water safety programs for children with Asd.

A lot of the Wise reported that the domain was so high that they had to refuse people, because each Y could only accept 50 kids.

The program provided skill, improvement for youth. The program provided an activity that families could enjoy together.

And it was noted that more research is needed about the effectiveness of private lessons versus small or typical size group lessons.

Next slide. And these are some of the references.

And I would like to thank my co-authors listed on the screen for their help. With this study. Thank you.

Thanks, Sharika, and we are getting some questions in the in the QA. So please continue to add those, and I'm going to turn it over to Darvain to talk about the burden of injury.

Thank you, Julie. So the title of our project is called The Burden of Injury and Autistic Children.

So next slide, please. Thank you. Some some background information. We have already, learned from the previous speakers that the injury is a leading cause of disability and children around the globe.

You know, country city list, say areas and number one leading cause of death and non fatal Ed. Visits in.

Children. Emergency has suggested that in your pose a especially significant burden for autistic individuals in general.

Next slide. Please. Thank you. So a test. Individuals are at higher risk of.

All kinds of injury. Related incidents, including suicidal ideation up to 66% more suicidal attempts up to 35% more and 80 visits relate to self inflicted injuries. About 500.

More. More specifically at this adolescence on the 15 years old were also fine to be 3 times more likely to die from unintentional injury.

Then the general population. So there are several gaps in the current literature. There is a lack of population based approach.

To examine the impact of injury to autistic children. Well from the full developmental.

Little is known economic, and it's disparities incurred as a result of house care services cost associated with injuries.

Across multiple payment sources in autistic children. So that kind of lead us to the.

Present study that we aim to provide up to date national estimates of the house burdened by injuries on Autist children.

We also want to examine disparities in related medical seeking behavior and medical expenditures in autistic children. Finally, we like to develop precise and.

Oh! Almost done tailored interventional programs to reduce injury, house and healthcare burden for this population.

Next, please. So the methods we used is we're using about 22 years of data from the medical expenditure which is sponsored by arc and the benefit of using this is that it has a collect data from nationally representative cohorts of civilian, non institutionalized households.

And it provides population based national healthcare service.

So now, specific to this project. 3 types of maps. Data files were used in ours the 20 years of 4 year, consolidate data files, medical condition files and the medical event files from some data set.

There's a distinction between public. Freely available data set and also the restricted.

Only be accessed. Mostly on site. As the data centers in DC, so and I will talk a little bit about that when we go to the next few slides.

So we have a couple of variables of interest based on the objectives. 1st is the outcome variables we're interested in, whether our test. Children had an instance of injury.

Secondly, we want to know if, when injury happens, is there an injury related treatment? Does it go to see the doctor after an injury and injury related mental expenditures paid out of pocket or by any type of insurance programs.

Wayne. Ascertain a lot of predictors available in the maps data set, including demographics Information from both the Trojan and the families. So we're going to put all those in our regression essays that we'll see in the results section.

Next, please. So a few words on the sample, you know. So because we covered 22 years of data. So we have used both the Icd 9, 10 code for the specified meaning, we have to go to the DC data center to access those restricted data files. And in the end we have a.

Sample size of 1,050 autistic children. All years of mind, and on the right side you will see a simple distribution of basic demographics

Across different levels. In this sample. Next.

So we have 2 sets of results. And I'll one is national estimates. And I will focus on that in today's webinar presentation, and we'll have slides saved for the

Trend. Nas is available. Online after the webinar. So let's take a look at the overview of the annualized estimates. So from the sample size.

We had estimated that nationally. They are about.

439,000 Artist children. And among those about 10%.

Of Zoom reported in incident during the interview period of the Memps Data Collection, and for those.

Artist children who had an injury. Most of them.

When to see it. Sick medical care after an injury.

About a 3rd of them were traded at Ed and

Much smaller number of Zoom trader, inpatient, or hospitalized, although these 2 numbers are not exclusive of each other, could be both seeing an Ed, and later transferred to inpatient services.

They Button cons are for the interrelated and mental expenditures per child.

On given years. So the total medical expenditure on the median level is \$252, and most of which was paid by insurance. So, as you can say, they out of pocket expenditure. The median level was 0, although they 95 competence interval ranges from.

0 all the way to \$45. Next, please.

So in the next few slides, I'm gonna present a few charts to give us some visualization about the distribution of injuries across different categories. So this 1st chart is about how

Our test. Children versus not just children, had different injury types. And from here you can say on most categories.

The 2 groups are similar to each other. The most significant difference occurs regarding open injuries where autistic children

Seem to have significantly, more. Then not just children. So that's something interesting and might have implications for injury. Prevention as well.

Next, please. So regarding service types. So we had several categories.

Ambulatory. State Department Hospital. Inpatient home health, prescribed medicine. So across all those 5 categories, so we can say that

I'll just. Children have been injury, they are more likely to receive home.

Services and prescribe medicine services, then, not as children, but all that.

The other categories. Now, just children are slightly more likely to receive those services, although the difference, not significant.

Next slide, please. So this slide presents a distribution across payment sources. So we had previous talk about auto pocket versus covered by insurance program. So here is a little bit more detail. So it covers pre private insurance family or out of pocket expenditures. Medicare Medicaid and.

And other types of payment sources, and from here can say that

Individuals, they're more likely to cover their healthcare service expenditures with Medicaid programs and families.

While they are less likely to utilize private insurance programs for covering the expenditure related to injury incidents.

Next, please. So finally, they say, it's a regression analysis. So we conducted.

Multiple linear regressions as well as regressions depending on the type of outcome. So for injury incidents, we can see the significant predictors are the age and the parental education and the geographic region. So children in the 10 to 14 years old are significantly less likely.

To have an injury compared to. They reference group, which is 0 to 4 years old and autistic, all autistic individuals does not include a non autistic individuals.

In terms of parental education. So. Or this individuals who have parents with college.

And higher education levels, they are more likely. To.

Have an injury. Compared to those who have parents with less than high. Education levels, and children who live in the west region of the country are more likely.

Then the northeast region. To have an injury. In terms of medical seeking behavior.

The skin predictors are race, and the parental merit. Just status. So

Black autistic children are. Found less likely.

To go to say a doctor after an injury. Then the white reference group. And. Children with would live with. Single parents, they are more likely to take medical care often. Those children who live with both parents. And finally about medical expenditure, we found that the only second predictor is the perceived mental health. So children ways poor perceived mental health. Were found to be much more likely. To Have higher levels of medical expenditure related to injury, incidence than those who report. Having excellent. Receive the mental health. Next, please. So in summary artists, children are at. In general at comparable risk of injury as a general population, with that being said The the limitation of this, they said, is that we don't know what kind of injury. They have. So although average out, it seems comparable between artists and artistic. We do know that. Artist individuals tend to suffer more open injuries. They're more likely to be hospitalized after an injury. They receive more home health, and prescribed medicine for injuries, and is a use Medicaid Medicare, and pay out of pocket for injury. Treatment. So kind of implications from this findings that the nexus study is that we want to look at. The detailed injury, mechanism, and injury intense individuals, and perhaps compare them with non-autist populations as well to find why this is the case, and the weather autistic children are at particular higher risks in certain injury, mechanism, or injury intense than just counterparts. Next slide, please. In terms of predictors of burden, of injury. We found age, print, or education, and the geographic regions are ready to injure risk. Race and apparel, marriage standards related to medical seeking behavior and mental health expenditures. And from the Nash, they said, due to time constraints. We didn't present here about the trend analysis from 2,000 to Turns on 21st we found that there Increase of children among general population, as we have seen from the previous presenters, as well increase of injury related economic burden for healthcare services. And injury rate and healthcare service utilization over time, and especially during different societal events that happens, including during the pandemic Area that these are kind of statistics change. From time to time. Next, please. So this is a final side. So I just want to thank us collaborators and you must flow and external institutions to collaborate on this project. We have an amazing Community Advisory Board who have a device from the beginning of designing this project and to interpretation of the. Statistical results. And also thank the Hersa autism. Secondary data research program for funding. This project. Thank you very much. Thank you. Jeremy.

So again. I've seen lots of questions come in. I think we're. Now ready to do some of our questions and answers, and I think everybody's gonna come back on the screen in a minute. Right, and I know some of our presenters have already been typing in some answers, as we've been going along.

So I'm gonna start with, I guess, coming in order, and I think the 1st one is to you, Sarah, that came in during your presentation, though others want to chime in, you are certainly welcome. So do we have any direct evidence that rising rates of autism in black and black and Latinx children are actually.

In black. Do to better access to diagnosis? Or is that an indirect hypothesis.

It's a great question. I think we would say it's an indirect hypothesis. As there's no other you know, we know that there have been increasing efforts to to make

Screening more universal and access to diagnostic services. Easier for

For. You know, people across for all children, basically. And it's there's really little systematic data collected on actual screening and testing practices. So I would say, that is more of an indirect.

Conclusion from the data. Hey? Thank you. Alright. There were a couple that came in around and swimming and teaching kids to swim. So, Sheree, I'm gonna try and.

Jump through and and group them for you. The. The 1st one was, is it more difficult to teach autistic children to learn how to swim in order to prevent drowning risk.

I think it depends on the child I know. With this current study we have monthly calls with the Y.

And they indicated that for some of the children it was. The group lessons work for them.

And then for some children. You know, they had to provide more one on one attention. So I think it depends on the

Level of the towel but there was success with the children, you know, depending on which method they provided.

Okay. Thank you. And then. Do you have the adaptive swim, curriculum, or resources that were provided to the Y.M.C.A. To share.

So those resources aren't available to share now, I'm gonna reach out to the Y and see if they are willing to share these resources.

I think they are proprietary to the Y. But they may be willing to share with I know.

A question in the chat, where they said some. May not have access to a.

So I'm sure they would probably be willing to share those materials. Great. Thank you.

Good. And that was the next question about whether they were proprietary or not. So one more about drowning and swim lessons, and then.

We'll we'll switch topics a little bit if we can. Says I, look forward to the results of the study about why swim lessons? Is there currently a list that can be accessed by caregivers.

And contains. Let locations, instructors with autism experience. Many families seek swim lessons, but report between instructors and children.

Yes, for the Y.M.C.A. I know you can reach out to your local Y to see if.

Provide adaptive swim lessons for this study. It was in 9 locations.

And I do have a list of the locations, so I can read it. So our study was in. Augusta, Georgia, Austin, Texas, Charlotte, North Carolina, Dallas.

I think it's. Pokamoke, Massachusetts, may not be pronouncing that correctly. Marshall, Town, Iowa, Richmond, Virginia, South Palm Beach, County, Florida, and Superior.

California, and we hope to expand to more wise. This is the pilot.

So we're hoping to expand some more wise next year. Great. Alright. Let me just scroll down a little bit here.

So there's a question about data. Is there data on kids being misdiagnosed? Meaning that autism spectrum disorder is missed and the child is diagnosed as having something else.

I, you know, I this is, gonna be less of a data driven answer. But I think, given the complexity. Of diagnosing autism. I think that that would have to. To be the case. You know the the degree to which that occurs, I think, would be would be challenging to to quantify, but certainly I think it's possible.

Sorry there's a lot of questions. So lots of stuff for folks that want to know about. So I'm just gonna read through them.

Can some of the self harm oops sorry. Can some of the self harming behavior in children with autism be characterized as the child stimming.

In other words, biting themselves, hitting themselves. I don't know the answer to that. I think that would be a good.

A good question for For a clinician. There certainly are stimming behaviors and people with autism that can help with kind of a self regulation.

So I think, whereas previously there may have been You know discouragement from engaging in those behaviors. I think that you know the current philosophy is that.

As long as it's not self interest or interest to other people, that it's that those are actually very helpful behaviors. But in terms of whether self.

Injury could be considered stimming. I'm not sure. Thank you.

And then Several questions related to elopeman.

One person wants to know is their tracking devices that are recommended for children. Do you have any guidelines or recommendations to support families with identifying tracking options?

So I think the short answer would be no, just in terms of our our role in recommending those kinds of supports and services.

But I think. You know you can. You can go to Cdc's website to find kind of recommendations for organizations that might be able to help. One thing that keeps going through my head in in terms of.

Autism in the best way to support children with. Certain challenging behaviors is most clinicians who work with people with autism will say, if you've met one person with autism, you've met one

person with autism, because this supports and services that individuals need are so specific. So I think.

You know, there's not one blanket recommendation that's gonna work best for every child who has that issue. So I think kind of working.

Comprehensively with their care. Team is going to be the best way to move forward.

Gerbi, I think this one is for you. I'm from the childcare system, and I think you covered this and a little bit in saying what your next steps were, but.

For your study, but I'm from the child welfare system. And I'm wondering if there are findings data that drills down to cause.

Was this which I said, I think is part of your next one. Was this abuse by a parent provider, lack of supervision, lack of parroting or understanding of the child behaviors or needs based on specific autism diagnosis.

And is there actually data regarding lack of resources or services that may lead to injury based on demographics.

Thank you. Asking this question. Yes. So I would say, like, from the data we analyze right now from the maps data, we would not be able to know.

Like, what's the cost of those injuries? It was not available in that data set. But I do know there are several other sets, including like the

National emergency department system data set and They have.

Specific variables that addresses a injury mechanism, and whether it's say it's unintentional injury or it's self harming. Or maybe it's a salt related injuries. So by looking at those data set is.

We'll we'll be able to tell what kind of distribution of mechanism and intense in autistic children.

With that being said, there are also differences.

Between those data sets like the maps they have said. Is population based.

But Those. Ed data says they will be based on a hospital. So they are sampled differently, so that represent.

Of the conclusions will need caution when we interpret the findings. But

I totally do that. It's very important to understand the the cost of those injuries, and to understand How? Those different reasons for injuries, including behaviors and maybe potential behaviors or services provided by care providers or parental super.

Patients might have. Contributed to injuries in autistic children.

Do we have any information on autism and other injury mechanisms like related back to mechanisms. But do we know anything about autism and other injuries, like car crashes.

Describe. Overdoses. Trevan. You mentioned suicide, risk, and suicide. In your one of your background slides.

Anything you guys can share with our audience. So my reading of the literature is minutes have focused on self inflicted not so much on on intentional injuries. But I I do agree that these are equally important topics to study. One other area that has drawn. Emerging attention is.

How artist children might not become their unique communication styles. They might have different ways to interact with law enforcement personnel, and which may contribute to certain conflicting behavior, and may result in injuries.

As well. So that's also an area of interest both

In real daily life, and as well as in kind of scientific interest. So the the.

Are suddenly a lot of things that way. Have yet to understand, and which.

Speaks to, I think, the importance of this webinar, and to start a new generation of more innovative research in this area.

Sara. And I did. Wanna yeah, jump in on this one, too. I think one of the challenges in terms of using a lot of the available data sets. And I'll use the the

The death certificate that work that should get described a little bit. Is, that. Autism isn't gonna be noted.

Necessarily, and in fact. We're finding we're we're working on a paper where they where Adam data were linked to death certificate. From the Ndi and.

Almost never is. Autism. On the death certificate, because it's rarely considered a contributing cause of death. I think drowning because of elopement, would be one of the few times where it would be included, but in a car crash. If it's not thought that the autism contributed to it like there were passenger it's not going to be noted. So it's going to be. If you're if you're starting. If you're not starting with a population of people with autism, it's gonna be really.

Challenging to get at these types of statistics, because it's so often not. Information that's captured in our existing systems.

Okay. Thank you. And we actually had an attendee respond to one of the questions around tracking that there are new shoe inserts which accommodate apple air tags that are hidden and easy to track, and affordable.

I should have hit. Answer, live! So let me read that again. For the tracking question again, new Inch Shoe inserts that accommodates.

That are easy and affordable.

Right. We still have about 4 more minutes, so let me just try and cover a few more questions.

There's a lot here.

Are there any parent caregiver educational materials available for injury, prevention.

Are there any parent caregiver education available for injured prevention among children with autism.

These materials could be available in clinical settings as well as the community.

And Sarah, you previously mentioned someone, the Cdc website. I don't know that those are specifically for elopement.

And I'm not sure if any of if. Yeah. Sherry, you know, of any materials. I guess that would be specific to to drowning.

Yeah, in the chat earlier. I think it was. We posted some drowning and

Johnny prevention resources. So in some of the resources they do talk about autism and elopement.

And about establishing a safety toolkit, a plan and stuff like that.

So some of the resources. There are some resources out there that are available. Yeah. And will those well be shared when the slides are posted.

Okay. Alright!

So this is. This is more of a comment than a question. But it said, although girls and boys should have the same opportunity to be identified. They simply don't.

Up in pediatricians don't recognize female autistic traits because of high masking and higher social capabilities compared to male.

So she'd love. This person would love to see more studies on the qualitative analysis of diagnosing experience.

Delayed diagnosis, misdiagnosis, etc. From the perspective of parents and guardians. I'm wondering if any of you have anything you want to add about diagnosing autism.

I can add that. So if because Because of exactly the issues that are brought up in this.

Question or comment. One of the the way that Adam.

Ascertains, autism is based on diagnosis. So it's not trying to find some kind of underlying ground truth because of the complexity of that.

It's trying to say, here are the number of people in these communities who are diagnosed which informs different, you know, kind of shows differences geographically, and and can allow identification of factors that are related with higher or lower

Identifications. But I think so. A lot of our work is not focused on kind of the the subtleties of the differences in

In the way that autism can present, and girls and present in girls and boys. However, it is a major focus of the field as a whole. So I think there are people trying to.

To look at that. That issue.

Alright! We are at 2 58. I hate to say it. We are at the end of what we have, and we have so many more questions. I know some of our panelists are are typing some responses, and I'm sorry we couldn't get to all of them, but I know we have some resources. We're gonna share.

And I also want to thank folks for their participation. Thank you for all these really great questions. And thank our presenters. Give them a big hand for sharing their time and their knowledge with us today. And I just want to ask folks.

That You could please. You'll get an evaluation that's up there, if we can please complete your evaluation of today's session. Again, the link is on the slide.

And. So with that. I think we are.

Ready to finish. Again. Thank you all.

And again the link to the evaluation is in the Webinar chat.

As well. So thank you all again. Hope. This was helpful.

I know I learned a lot and thank you again to the presenters. Bye.