International 22q11.2 Foundation

Newsletter December 2021

Greetings from the International 22q11.2 Foundation. We hope you and your family are doing well during this festive season.

We have compiled a lot of useful information about 22q11.2 deletion and duplication syndromes into this newsletter. As you prepare gifts and cards for your loved ones, we hope you will consider sharing this newsletter with them as a way of spreading awareness about 22q differences.

Announcing: The International 22q11.2 Foundation's

16th Annual Faces of Sunshine Calendar

On behalf of the International 22q11.2 Foundation, Inc., it is our pleasure to announce the featured children for each month of our **2022 Calendar**. This year was particularly challenging as so many wonderful photos were submitted, but we have managed to include all eligible entries throughout the calendar.

January – Viola C from San Bernardino, California
February – Karsen B from Galena, Ohio
March – Teresa M from San Antonio, Texas
April – Olivia W from Lithopolis, Ohio
May – Noah Y from Ward, Arkansas
June – Lexi P from Berea, Kentucky
July – Bella Rose C from Lafayette, Indiana
August – Jackson C from Abilene, Texas
September – Jayden K from Burlington, Iowa
October – Emily & Ruby N from Blacktown, Australia
November – Sawyer B from Thornton, Colorado
December – Myla K from Scottdale, Pennsylvania

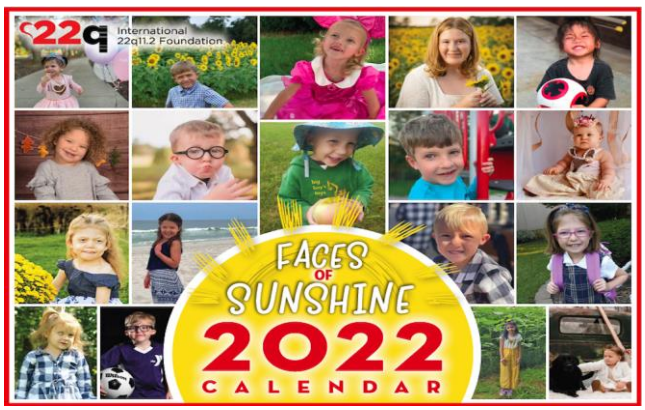
...and the ***2022 Cover*** *Goes to*
all our beautiful faces of Sunshine

Many thanks to all who submitted photos; we very much hope you enjoy the calendar as well as all of the beautiful faces of sunshine throughout the New Year!

This calendar is a great way to show your 22q pride. Additionally, this item makes a lovely holiday gift; so order now to ensure all orders can be filled.

Calendars may be ordered via **our website**. All proceeds benefit the work of the International 22q11.2 Foundation, Inc.

Regards,
International 22q11.2 Foundation, Inc



A note from our Board of Directors

Dear Friend of the International 22q11.2 Foundation,

As we come to the close of 2021, we want to thank you from the bottom of our collective hearts for your continuing support of the International 22q11.2 Foundation. Throughout the challenges of the past two years, your generosity has allowed us to remain focused on the needs of the global 22q community, while navigating the difficulties of the ongoing pandemic. As you can imagine, COVID-19 has not halted the 1 in 2148 children born with 22q11.2 annually nor the isolation felt by children, adolescents, adults, and families affected by this multisystem condition.

As we write to you today, we are especially proud of the fact that we have provided successful programming during this period, having pivoted, essentially immediately following the lockdown, to virtual events, substantially increasing our presence across the 22q community – touching >15,000 parents and professionals with our informational card mailing alone. In addition, during this time, we revamped our website and introduced our new logo which now endorses our evolving growth and connection to new audiences while honoring our existing partners. Our website enables us to deliver the most cutting-edge information related to 22q11.2 chromosome differences from our exceptional and unparalleled International Medical Advisory Board members, providing invaluable resources to healthcare professionals and most importantly families attempting to navigate life with 22q. To that end, we recently created informational webinars, including an in-depth overview, “22q – a Tiny Piece Leading to a Big Picture”, by founding board member, Prof. Donna M. McDonald-McGinn, Director of the 22q and You Center at the Children's Hospital of Philadelphia, and “Meet the Advisory Board and Ask the Expert” segments, led by Medical Advisory Board Chair, Prof. Anne Bassett, Director of the Dalglish Family 22q Clinic at the Toronto General Hospital, where we respond to queries from 22q families directly. Concurrently, we strive to inspire when sharing personal stories from families via social media, for example, 8-year-old

A note from our Board of Directors (continued)

Lucas who underwent complex open-heart surgery at 3 months of age but remained undiagnosed with a chromosome 22q11.2 deletion until age 2 - sending his parents and healthcare providers on a diagnostic odyssey. Now a thriving boy who loves playing the drums, participating in youth sports, and cheering on his favorite college team, the Iowa Hawkeyes, his parents celebrate the fact that his care is now personalized to his underlying diagnosis.

As we approach 20**22**, we look forward to the future with high hopes for Lucas and every Lucas. We will continue to lead the world in raising awareness and friendship via our hallmark events including "22q at the Zoo - Worldwide Awareness Day" and our annual "Faces of Sunshine" Calendar. Your support is vital in all of this – in helping us continue to improve the long-term quality of life for those affected by 22q, in promoting cutting-edge research, in providing educational and behavioral health resources, and in promoting 22q awareness while uniting 22q communities around the globe.

Please consider a year-end donation to continue to enable us to provide the support families coping with 22q11.2 desperately need. No question, your tax-deductible gift will make a lasting impact. Thank you in advance for your consideration.

Best wishes for happy and healthy 2022,

International 22q11.2 Foundation, Inc. Board of Directors

The International 22q11.2 Foundation's Board of Directors includes parents, health-care professionals with expertise in chromosome 22q11.2 differences, and members of the lay public. All members are volunteers, many of whom have been contributing to the 22q community through the Foundation since its inception in 2003. The Board endeavors to fulfill the vision and mission of the Foundation, as well as to provide oversight of fiscal operations.

Team 22q Fundraising

- **Tell 22 Friends about 22q**
- **Create Your Own Event/Fundraiser – Contact us at info@22q.org**
- **Be a 22q Citizen Journalist – Share your event on social media!**
- **Plan a 22q at the Zoo event**
- **Plan a 22K for 22q event – It can also be 2.2K!**
- **Select 22q as your Charity of Choice on AmazonSmile**

COVID-19 Vaccination

Did you get your COVID-19 vaccines?

COVID-19 vaccines contain no virus capable of causing disease, so they are safe – and indeed recommended for people with immune deficiencies. If you are allergic to components of the vaccine, please check with your allergist for instructions (see also p. 7 for Q&A with Dr. Sullivan).

Our Medical Advisory Board's recommendations for Individuals who are eligible to receive COVID-19 vaccines:

All **individuals with 22q** should **receive the vaccine** - the vaccines protect very well against the worst effects of the virus.

All **close contacts** (e.g., **immediate family members**) of individuals with 22q should also **receive the vaccine**, in order to protect the person in the family likely to be most in danger of getting very sick from the virus (that is, the person with 22q).

Eligibility for COVID-19 Vaccination

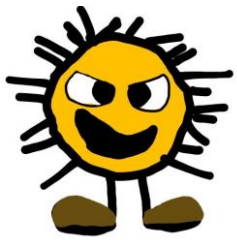
In **USA**:

- Everyone aged 5 and over can get the vaccine.
- Everyone aged 16 and over can get a booster.
- See the **CDC website** for details about eligibility.

If you live **outside of the USA**, please check with the health authority in your area for vaccination eligibility.

Why get a booster?

- Vaccine effectiveness may decrease over time.
- Data so far shows that with a booster, there is good (if imperfect) protection from the new omicron variant.
- See the **CDC website** for details about boosters.



If you are concerned about receiving COVID-19 vaccines or have any questions about your health, please check with your healthcare provider directly.

Ask the Experts

Here are some of the most common questions that families with 22q differences ask. The members of our Medical Advisory Board, who are experts from multiple fields are happy to answer them.

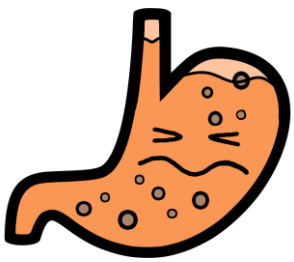
Q: Why does my child always have **cavities**?

A: There are many contributors to cavities, sugary nutrition, dry mouth, poorly formed enamel, and avoidance of brushing.

Try drinking fluoridated water after nutrition, using a fluoridated rinse, and chewing sugarless gum to promote salivation and help clean tooth surfaces.

Dr. Patricia Beals
Craniofacial Orthodontist
Phoenix, USA

Q: How do doctors decide when to treat **gastroesophageal reflux**?



A: Treatment is recommended when children have pain, irritability, excessive vomiting/spitting up that leads to poor weight gain, food refusal, swallowing problems, recurrent choking or pneumonias and interrupted breathing or apnea.

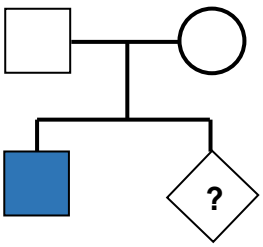
Prof. Maria Mascarenhas
Pediatric Gastroenterologist, Nutrition Pediatrician, and Integrative Health
Philadelphia, USA

Q: What's up with **nosebleeds** in 22q?

A: Nosebleeds are common: nasal allergies, velopharyngeal insufficiency, and frequent colds all increase the risk (because the nose gets irritated). Hydrate with saline spray, cool mist humidifier, and Vaseline (at nares) and keep fingers/tissues out.

Dr. Michele Lambert
Pediatric Hematologist
Philadelphia, USA

Q: Neither my partner nor myself have the deletion, but we have had a child with the deletion. Does this mean we are at increased risk of having a **second child** with 22q11.2DS?



A: The short answer is no. By way of caveat the more complicated answer is that there may be a small number of parents who have a variation in the structure of their chromosome 22 that could in theory predispose to a full deletion in offspring. This is an area of future research, but in any case associated risks are still likely to be small overall.

Prof. Peter Scambler
Basic Science Geneticist
London, United Kingdom

Ask the Experts (Continued)

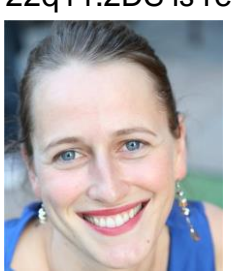
Q: When will my child **talk**?

A: Children with 22q often speak late and have ongoing speech and language concerns. Speech and language therapy plays a critical role in management of speech, language, learning, palate and voice concerns throughout childhood.

Cynthia Solot, MA, CCC-SLP
Speech-Language Pathologist
Philadelphia, USA

Q: My child was diagnosed with Tetralogy of Fallot. Is this a typical heart condition for children with 22q11.2DS?

A: Tetralogy of Fallot (ToF) is one of the most frequent and typical heart defects in children with 22q11.2. It is present in about 30-40% of children with 22q, and its frequency is due to the influence that the 22q11.2 deletion has on the developing heart during fetal life. In particular the gene TBX1 involved in the 22q11.2 region is responsible for that part of the heart from which part of the right ventricle and the pulmonary artery will develop. It is also a typical heart defect since 22q11.2DS is found in about 20% children with ToF: indeed, if ToF is diagnosed during fetal life or infancy, genetic testing for 22q11.2DS is recommended.



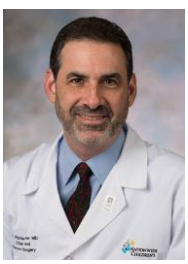
Dr. Marta Unolt
Pediatric Cardiologist
Rome, Italy

Q: Can **velopharyngeal dysfunction** (hypernasal speech) be treated by speech therapy alone?

A. No. Although speech therapy is essential to the treatment of articulation errors in 22qDS, velopharyngeal surgery is necessary to treat velopharyngeal dysfunction.

More information

- Episode #5 "22q11.2 VPD and Hyper-nasal Speech" | 22q Family Foundation
- Surgical Considerations in 22Q11.2 Deletion Syndrome - ScienceDirect



Prof. Richard Kirschner
Pediatric Plastic Surgeon
Columbus, USA

Q: What is my risk of **seizures** related to 22q11.2DS?

A: The prevalence of epilepsy is 10-30% compared to 1% in the general population. It is important to consider checking for calcium as this can be a trigger. Febrile seizures are the most common seizure type.

More information

- Association of hypocalcemia with congenital heart disease in 22q11.2 deletion syndrome.
- Epilepsy and seizures in young people with 22q11.2 deletion syndrome: Prevalence and links with other neurodevelopmental disorders
- Neurologic challenges in 22q11.2 deletion syndrome.

Dr. Madeline Chadehumbe
Pediatric Neurologist
Philadelphia, USA

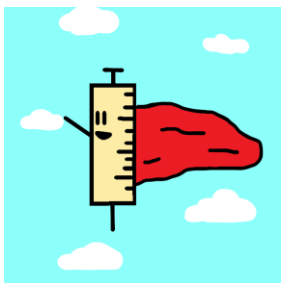
Ask the Experts (Continued)

Q: My child has a lot of **respiratory infections**. What can I expect in the future?

A: Most children get better before school starts. Some have continuous problems with ear infections, and in a minority the immunodeficiency continues into adulthood.

Dr. Sólveig Óskarsdóttir
Pediatrician
Goteborg, Sweden

Q: Can people with 22q11.2 deletion safely receive the **COVID vaccine** (and do they respond)?



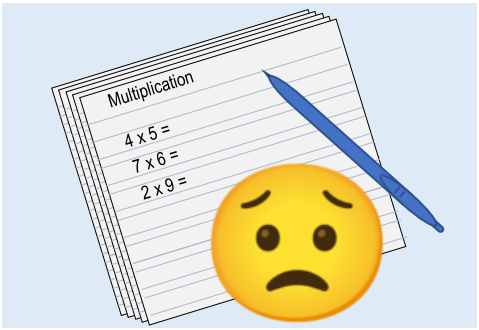
A: Yes - people with 22q11.2 deletion syndrome can safely receive the vaccine. If the person has seizures that have been difficult to control or heart disease that is considered unstable, the person should check with their specialist managing the seizures or heart disease. In terms of how effective the vaccines are in 22q11.2 deletion, the vaccine has been shown to be effective across a range of immune deficiencies including people who don't respond to other vaccines.

Prof. Kathleen Sullivan
Immunologist
Philadelphia, USA

Q: How can my child get help in **school**?

A: All children affected by 22q11.2DS require a personalized Individual Education Plan (IEP), which is updated annually by the special education team. The team includes parents, and must also include the child, once they reach middle school and high school age. In this way, everyone's concerns are heard and respected. The special education classification of Other Health Impairment (OHI) is almost always most appropriate for children affected by 22q11.2DS, as it takes into account all their complex and varied medical needs.

Dr. Edward Moss
Neuropsychologist
Bryn Mawr, USA



Q: Should I push or protect my child in **school**?

A: A healthy balance between your child's abilities and the academic/social demands is key. The psychiatric vulnerability in 22q11DS warrants erring on the side of caution to avoid chronic stress.

Dr. Jacob Vorstman
Child and Adolescent Psychiatrist
Toronto, Canada

Ask the Experts (Continued)

Q: As a parent, who will **take care** of my loved one with 22q and complex care needs when I am no longer able? (As a patient, who will take care of me?)

A: It is always a great idea to plan for the future of your loved one, as best as possible, when you are able to do so. Here are some general tips to help.

- Have open, honest and developmentally appropriate conversations about wants and support needs with your loved one. Include, as appropriate, informal (e.g., family and friends) and formal (e.g., community support staff, medical professionals) supports (the "circle of care") in the conversations. Revisit and modify these advance care plans, as needed (e.g., as the "circle" changes over time).
- Educate yourself about who your loved one's substitute decision maker is now, and who would be best to take on that role in the future.
- Educate yourself about community-based and government funding, supports and services available to your loved one. Connect with local agencies, ask questions, and advocate for supports. Revisit this periodically, as the supports and services change over time.
- Connect with a legal clinic that specializes in supporting people with disabilities and their families.
- For the person with 22q who asks about this, reassurance that they will be taken care of will be important. As will knowing who is in their circle of care.

Prof. Anne Bassett
Psychiatrist
Toronto, Canada

Q: Why is it important to understand why some people with the deletion **have mild medical problems while others are very ill**?

A: For individuals affected with 22q11.2 deletion syndrome, there are genetic DNA changes and environmental factors that affect the developing baby in the mother's womb. For genetic DNA changes, labs are performing sequencing of the whole genome. Once we identify genes that alter the overall severity of medical symptoms, it may be possible to better predict eventual health outcomes during adulthood.

Q: Why do researchers use **mice** to study human genetic conditions?

A: It is not ethically possible to study human embryos so we use mice as a mammalian model system. Although mice are so different than us, many of the organs including the heart are quite similar to ours. We can model 22q11.2 deletion syndrome in mice by generating deletions of different sizes. Then we can understand how the genes in the 22q11.2 region affect embryonic development.

Prof. Bernice Morrow
Basic Science Geneticist
New York, USA

Disclaimer: The Q&As in the Ask the Expert section are provided for educational purposes only. They are not intended to be taken as medical advice. The needs for everyone are different, and not all information is applicable to everyone. If you have questions or concerns, please discuss them with your doctor or healthcare provider.

22q11.2 Deletion Facts

22q11.2 deletion syndrome occurs when a person is missing a piece of chromosome 22. This results in the loss of ~50 genes that sets up a blueprint for how the body is formed and may function. Smaller deletions have also been found.

Major medical problems in children with **22q11.2 deletion syndrome** include (but are not limited to) immune problems, allergies, abnormalities of the palate, heart defects, feeding and swallowing differences, endocrine problems, scoliosis, kidney and breathing problems.

There are significant medical costs associated with **22q11.2 deletion syndrome**. A study from Philadelphia, USA found that the **average medical cost for a patient from the point of diagnosis to age 20 was $727,178** (USD). Patients with heart abnormalities were faced with a cost that was **5 times** that of those who had no heart problem, and individuals with an immune problem due to low T-cell counts had a cost that was twice the amount of those with normal counts.

Researchers in Philadelphia, USA have been trying to understand the **interaction between the immune system with brain and behavior**. They found that the levels of some types of T cells were higher in patients with **22q11.2 deletion syndrome** who have anxiety than that in patients without any psychiatric diagnosis.

T cells can influence the inflammatory response and **play a role in the immune-brain communication**.

A recent study, led by researchers in Canada, found the incidence of **22q11.2 deletion syndrome** to be **1 in 2148** live births, which means **22q11.2 deletion syndrome** is more common than cystic fibrosis (CF) & severe combined immunodeficiency (SCID). Both CF and SCID are often screened for by newborn screening, but **22q11.2 deletion syndrome** has not yet been added to the list of newborn screen. **We need 22q11.2 deletion syndrome added to newborn screening around the world!**

The **IBBC** found that individuals with **22q11.2 deletion syndrome** are at decreased risk for substance use, even though they have an increased risk of psychiatric illness.

In fact, healthy controls were **20 times** more likely to use drugs and alcohol in general compared with patients with 22q11.2 deletion syndrome.

The IBBC found schizophrenia spectrum disorders present in **41%** of "selected adults" (those being followed for psychiatric illness) over age 25 years with **22q11.2 deletion syndrome**. These problems can be treated with medications, psychoeducation, rehabilitation, and active stress reduction strategies.

A study published in 2020 showed that individuals with **22q11.2 deletion syndrome** were **more likely to develop type 2 diabetes** compared to the general population.

The average age at diagnosis of diabetes was 32 years in adults with 22q11.2 deletion syndrome, compared to 50 years in the Canadian general population. Individuals with 22q should therefore be monitored for this condition from a younger age.

22q11.2 Deletion Facts (continued)

Most children who have **22q11.2 deletion syndrome** have **significant language impairments**. Children should be assessed as early as possible for impairments in receptive and expressive language.

For more information, please read "**Speech-Language Disorders in 22q11.2 Deletion Syndrome: Best Practices for Diagnosis and Management**" by **Cynthia Solot, MA, SLP-CCC** and her team from Philadelphia, USA, and around the world.

Researchers in Geneva, Switzerland, and Tel Aviv, Israel examined the education and employment situations in individuals with **22q11.2 deletion syndrome**.

Cognitive abilities were key in determining whether children and adolescents would enter mainstream education or special education.

More than half of the adults with 22q11.2 deletion syndrome were employed. **Adaptive functioning**, **more than cognitive abilities**, were predictors of employment.

Some studies have found that children with **22q11.2 deletions** have a **higher risk of obstructive sleep apnea (OSA)** compared to their peers. This is important to consider when the family is thinking about a palate repair.

Transition from **pediatric to adult care** can be challenging, with an Irish group of young adults with **22q11.2 deletion syndrome** reporting a lack of information transfer and the need for multiple retelling of their stories. They have since developed a **patient–clinician communication tool** to help with information transfer and to record important points during medical encounters.

The International Consortium on Brain and Behavior (IBBC) studied over 1,400 individuals with **22q11.2 deletion syndrome**. **ADHD** was the most frequent disorder in children (37%). There is a need to **regularly check for and manage** attentional deficits in school aged children with 22q11.2 deletion syndrome, as these can interfere with learning and academic achievement.

A 2021 study found that 66% of adults with **22q11.2 deletion syndrome** were sexually active with others, and 82% of these individuals engaged in **high-risk sexual behaviors**, regardless of an intellectual disability or knowledge deficits. There is a need to increase preventative sexual health measures as well as discussions and education to improve overall quality of life in adults with 22q.

Orthopedic problems are often overlooked among individuals with **22q11.2 deletion syndrome**. The most common include abnormalities of the bones of the neck, scoliosis (curvature of the spine), dislocations of the patella, and club foot.

For some conditions, **early detection** means the treatment method used can be less invasive. In addition, patients with certain problems are advised to **avoid contact sports**.

22q11.2 deletion syndrome-associated Parkinson's disease (PD) accounts for about 0.5% of early-onset PD. The average age of onset for PD in patients with 22q11.2 deletion syndrome is ~40 years old.

Early diagnosis is important as standard treatments for PD are recommended.

22q11.2 Deletion Facts (continued)

Researchers in Brisbane, Australia asked children to rate their health-related quality of life.

Scores from both the children and their parents indicate that children with **22q11.2 deletion syndrome** have a significantly lower quality of life when compared to their healthy peers or to those with a chronic disease.

It is important to understand why so we can help all children, adolescents and adults live healthy and happy lives.

Researchers examined **family dynamics** by interviewing the siblings of individuals with **22q11.2 deletion syndrome**. The participants (aged 16 to 42) showed conflicting feelings, but they understood and accepted that their affected sibling with 22q11.2 deletion syndrome was the priority in their family.

The researchers caution that it is important that siblings feel included, loved, and appreciated.

A study from Philadelphia, USA found that among 1,422 patients with **22q11.2 deletion syndrome, 1% were found to have a second genetic condition unrelated to the chromosome 22q11.2 difference**. This supports the statement that 22q11.2 is common. In addition, patients benefit from evaluation at a 22q11.2 Center of Excellence where providers are especially experienced in distinguishing those problems related to the deletion and those that may have another important cause.

The **IBBC** found over 30% of individuals with **22q11.2 deletion syndrome** to have **anxiety disorders**. This was more common in children and adolescents than in adults.

Treatment options for anxiety disorders include cognitive-behavioral therapy and medications.

Successful management of anxiety and depression may help prevent or delay the onset of psychotic disorders and reducing the severity of psychotic symptoms.

Nomenclature

Old Names of 22q11.2 deletion syndrome

- Autosomal dominant Opitz G/BBB syndrome
- CATCH22
- Cayler cardiofacial syndrome
- Conotruncal anomaly face syndrome (CTAF)
- Deletion 22q11.2 syndrome
- DiGeorge syndrome
- Sedlackova syndrome
- Shprintzen syndrome
- VCFS
- Velocardiofacial syndrome
- Velo-cardio-facial syndrome

Now that researchers have found the unifying cause, we encourage everyone to use the name **22q11.2 deletion syndrome (22q11.2DS).**

In English-speaking communities, abbreviations that are also in use for 22q11.2 deletion syndrome include: 22q, 22qDS, and 22q11DS.

22q11.2 duplication syndrome is typically abbreviated as **22q11.2DupS**.

22q11.2 Duplication Facts

22q11.2 duplication syndrome is caused by an **extra piece of chromosome 22**. This results in ~50 extra genes which sets up a blueprint for how the body is formed and may function. Smaller duplications have also been found. Any person with the duplication has a 50% chance of passing it on in every pregnancy.

22q11.2 duplication syndrome often runs in the family. In fact, 60% of individuals with the 22q11.2 duplication inherit it from a parent. When the duplication is not inherited it occurs as a random event. **Nothing that the parents did or did not do caused it to occur.**

Children with **22q11.2 duplication syndrome** can have **congenital heart disease.** The more common ones include hypoplastic left heart syndrome, ventricular septal defects, tetralogy of Fallot, truncus arteriosus, and atrial septal defects.

Individuals with **22q11.2 duplication syndrome** may have **problems fighting infections**.

Patients benefit from advice from an immunologist familiar with 22q11.2 duplication syndrome and potentially immunoglobulin replacement therapy.

Strabismus is the most frequent eye problem in children with **22q11.2 duplications**. **Regular eye check ups are recommended**.

About 25% of children with **22q11.2 duplication syndrome** have **autism spectrum disorder**.

Children with **22q11.2 duplication syndrome** have **variable** findings. They may include birth defects, developmental differences and behavioral problems.

22q11.2 duplication syndrome is frequently identified in children with developmental delay or behavioral differences. Individuals generally benefit from care at a 22q multidisciplinary center. Go to **www.22q.org** to find one.

22q11.2 Differences Facts

International care guidelines for **22q11.2 deletion syndrome** outline suggested screenings, evaluation, and management practices for this condition.

A study published in 2020 revealed that children receiving coordinated **interdisciplinary 22q team care** had significantly **greater adherence** to the care guidelines than children who did not receive team care.

During the COVID pandemic, **telehealth has improved access to clinical centers of excellence for 22q11.2 deletion and duplication syndromes** for both families who reside near such centers and those that live at a distance.

Healthcare providers caring for those with **chromosome 22q11.2 differences**, along with researchers who study the underlying biology, have joined together to form the **22q11.2 Society (22qsociety.org)**. They collaborate often and share their findings in local and international conferences. They also developed clinical practice guidelines to help other medical professionals care for individuals with these conditions.

Please help the International 22q11.2 Foundation in **spreading the word and raising funds for 22q11.2 deletion and duplication**.

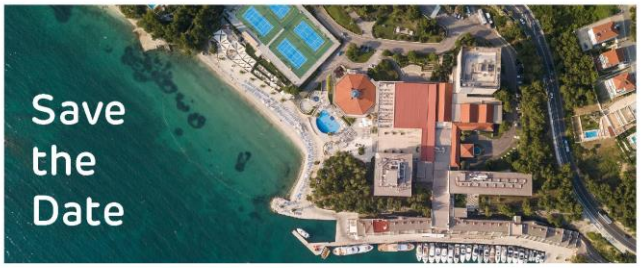
If you or your child has a difference on **chromosome 22q11.2**, you are not alone. Please visit **www.22q.org** to connect with other families just like you. **Because we are all in this together.**

Disclaimer: The 22q Deletion Facts, 22q Duplication Facts, and 22q Differences Facts are provided for educational purposes only. They are not intended to be taken as medical advice. The needs for everyone are different, and not all information is applicable to everyone. If you have questions or concerns, please discuss them with your doctor or healthcare provider.

Events in 2022

The 12th Annual 22q at the Zoo Worldwide Awareness Day®
will be held on
May 22, 2022 (Sunday)

The 22q at the Zoo event aims to raise awareness about chromosomal differences. It also gives families, friends, and professionals a chance to socialize and network.



12th Biennial International 22q11.2 Conference

Family Meeting
June 26 – 28, 2022
Le Méridien Lav Hotel
Split, Croatia

For more information visit
CHOP.cloud-cme.com

Photos courtesy of Le Méridien Lav Hotel, Split, Croatia

More information will be available in 2022.
Questions? Please email us at info@22q.org

We appreciate your financial support!

Our mission: to improve the quality of life for individuals affected by chromosome 22q11.2 differences through family and professional partnerships.

At the International 22q11.2 Foundation, we help families that need important resources and information to meet the needs of loved ones with 22q.

We work with top medical experts from around the world to build our understanding of 22q, improve treatment options for families, and conduct the necessary research for longer, healthier lives for patients.

Your support makes a difference!

Please visit the **Donate** page on our website for information on donating online, by mail, or via other methods.

Please also **Shop** on our webstore.

For more information, please visit our website at **www.22q.org** or email us at **info@22q.org**. **Thank you**!

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