Helping Children with Needle/Vaccine-Related Anxiety – Eight Strategies

Fear of needles is extremely common in children, adolescents, and adults. Most individuals develop a fear of needles at a young age (around age 5) with anxiety typically decreasing as we get older. For some individuals, the anxiety can get worse and “needle phobia” develops where the anxiety can take over and cause kids or teens to avoid needles or engage in other problematic behaviors during procedures (like screaming, resisting the procedure, or aggression towards parents and medical staff). The good news is that the strategies below may help parents ease their child’s fear and anxiety about getting a vaccine or needle and make the experience more tolerable now and improve future experiences as well.

1. Educate Yourself and Your Child about Anxiety, Phobias and Fear

Help your child understand the difference between fear and anxiety. Both emotions are normal to feel, and are in response to the feeling part of the brain trying to protect us by sending off a warning alarm. When the warning alarm goes off in situations when there is a REAL danger (e.g., hiking in the
woods and seeing a bear) we feel fear. In these situations we want to feel fear as it signals to us that we need to avoid the bear and the fear alarm keeps us safe. But sometimes the feeling part of the brain sends off a “false alarm” in response to a MAYBE danger (e.g., seeing a needle) but the body responds as if it is a REAL danger (and we feel afraid). Because there is no true danger, the emotion felt is anxiety. Fear is felt when the danger is real while anxiety is felt when it is a “maybe” danger.

For some children, getting a needle is no big deal. However, for most children, getting a needle is not a pleasant experience and they may feel anxious about it. Importantly, for some children the experience of, or even thought of, getting a needle produces so much anxiety that they are unable to do important activities that affect health (e.g., getting vaccinations or needed bloodwork). When that is the case, a child may be experiencing needle phobia, also known as “trypanophobia” and blood injection injury phobia. Needle phobias can sometimes occur spontaneously, while other times they may develop in response to an earlier negative or traumatic experience while receiving a needle, seeing someone else receive a needle or even listening to others talk about it in a negative way.

To learn more about anxiety and phobias, please refer to the following Anxiety Canada articles and YouTube videos:

For children:

- [https://www.anxietycanada.com/disorders/specific-phobia-2u](https://www.anxietycanada.com/disorders/specific-phobia-2u)
- [Fight Flight Freeze – A Guide to Anxiety for Kids](https://www.anxietycanada.com/disorders/specific-phobia-2u)

For teens:

- [https://www.youtube.com/watch?v=rpolpKTWrp4&t=5s](https://www.youtube.com/watch?v=rpolpKTWrp4&t=5s)

Generally, parents can help by communicating to children that it’s OK and normal to feel anxious about needles. But when children have developed a
“needle phobia”, parents will want to communicate differently. It is important that the message “it’s not your fault” is given to these children by validating their feelings of fear, while teaching that the brain is sending off a false alarm in response to a “MAYBE” danger.

- For young children, giving anxiety a name helps everyone see anxiety as separate from the child. Some popular names are Worry Bully, Mr. Worry, or you can use any name that makes sense, and is not scary. You want to let children know that it is okay to feel worried or anxious because a little worry helps keep us safe. But we don’t want the worry to get too big because then the Worry Bully may take over and we won’t be able to do the things we need to do, like getting a needle and protecting ourselves from the flu (or whatever the vaccine is for).
- For older children/teens, communicating in a way that takes away blame and separates the anxiety from the person is helpful. For example, “It’s not your fault that you become so upset when getting a needle. Your brain is sending a false alarm and telling you it’s dangerous”.

2. Help Children Identify the Anxiety – What is the “Worry Bully” Saying?

We are not going to be able to help children reduce their anxiety around needles unless we know exactly what thoughts are causing the false alarm to go off in the brain. By figuring out the real focus of their fear and anxiety, it helps determine the steps needed to achieve a goal (e.g., getting a needle).

- With younger children, including phrases such as “being brave and bossing back Mr. Worry” is helpful. To better understand what thoughts are contributing to anxiety, parents can ask questions, such as: “How is Mr. Worry scaring you? What is the Worry Bully saying will happen if you get a needle?”

- With older children/teens, you may want to elicit the teen’s anxious thoughts by asking clarifying questions such as: “What exactly is it about needles that scares you?” or “Is there a certain part about getting a needle that you think will be extra hard? or that you will not be able to handle?”
It is not unusual for children to be unable to vocalize the thoughts contributing to the feelings of fear, and in these cases using a “best guessing” strategy may be helpful. Worries about how painful the needle will be are very common, and there are specific strategies to help prevent and manage pain from needles. Parents communicate their “best guess” by talking about worries other children/teens may have when getting a needle. Research even shows us that how we talk about the pain in anticipation of a needle matters and to stick with something more neutral, like: “I know some kids wonder what it will feel like, others worry that they will pass out, or cry so much that other people think they are a baby. What is Mr. Worry scaring you about?”

3. Help Your Child Identify a “Good Reason” for Getting Vaccinated

When we are reluctant to perform a necessary task, it is often helpful to motivate ourselves by identifying a “good reason” to do the task. When the feeling brain sends a false alarm, it overrides the thinking part of the brain and we have trouble thinking clearly. As a result, children may have a harder time identifying why it is a good idea to get a needle/vaccinated. Reminding children of all the fun things we will be able to do again once we are vaccinated or identifying a previously wanted goal may help children rise to the challenge of being brave and doing something that feels scary. For some children, that goal may be having playdates again, not having to wear a mask, going to the movies, or hugging and visiting grandparents or relatives.

For children who are afraid of needles, it may not be enough to simply remind them of why it’s a good idea. In these cases, rewarding children for being brave and challenging themselves is helpful and motivating. Providing a small reward (e.g., extra story at bedtime, choosing what to have for dinner, an ice cream afterwards) is better than promising expensive gifts (as the child may expect it each time). Depending how anxious your child is, parents may want to reward even small brave behaviours towards getting the vaccine (e.g., earning tokens or stickers for the drive there, waiting at the appointment, and finally for getting the vaccine). Of course, the most important reward is praise from parents (e.g., “Wow you are so brave, I know that was hard for you. I am so proud of you and how you didn’t let the Worry Bully win”).

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How parents talk about the experience afterwards is important. Even if your child is not successful but uses positive coping skills, praise your child and point out the small steps achieved, and then talk about what we can do differently next time. By focusing on what went well, such as using coping strategies like deep breathing, it helps children develop more accurate/neutral or positive memories of the event and this type of communication can help decrease pain and fear at subsequent needles. For a helpful article on rewarding brave behaviour and ideas for rewards, please refer to the following Anxiety Canada Resource document: https://www.anxietycanada.com/articles/rewarding-bravery

4. Help Children Identify and Challenge Thinking Traps (or “tricks and truths”)

Regardless of age, many people have thoughts that make anxiety stronger. We need to identify these thoughts so we can talk about them and see if they are accurate. We tend to worry about something that happened in the past (e.g., “Last time I had to get a needle it was a bad experience and hurt”) or about something that may happen in the future (e.g., “What if it hurts even more this time?”). Other common thinking patterns are overestimating how dangerous a situation will be (e.g., “What if something bad happens after I get the needle? What if the needle breaks off or goes through my arm?”) or underestimating our ability to cope (e.g., “What if I can’t handle the pain and make a scene and everyone looks at me?”).

Help children recognize these thinking traps and frame them as Worry Bully/anxiety “tricks”. Some common tricks by Mr. Worry are:

- Anxiety is bad, and you can’t handle the feeling of anxiety, so you better avoid getting a needle.
- If you feel anxious or worried, then the situation must truly be dangerous.
- If you have a worry, then it IS real and IS going to happen.

Help children learn the “truth” to counter the “tricks”:
• Anxiety is not bad, it doesn't feel good, but many people feel it and it is normal, you don't need to run away from it.
• Just because you feel anxious or worried doesn't mean the situation is truly dangerous, sometimes our feeling brain sends a false alarm.
• We can't make things happen or make something true just by thinking it, we don't have that power.

Some other types of thinking traps can be found at: https://www.anxietycanada.com/articles/thinking-traps

Once you can identify the thoughts that make you anxious, determine if there are any thinking traps (or “tricks”) and find ways to challenge them. With younger children, helping figure out what Mr. Worry is saying and identifying the tricks is the first step.

Parents can say:

• “It looks like Mr. Worry is trying to trick you again. Let's talk back using our truths””
• “It may hurt for a little bit, but then it will be all over, and we can go and get our ice cream for being brave.”
• “It sounds like Mr. Worry is trying to trick you into thinking that it is dangerous to get a needle because it feels so scary. The truth is that it's the feeling part of your brain sending you a false alarm, making it feel so scary.” “I know it feels scary to get a needle but that doesn’t mean it's dangerous and you can’t handle it.”
• “It sounds like Worry Bully is tricking you and saying that you have some magical powers and that you can make things happen just by thinking about it. The truth is we can't make something happen just by thinking about it and we don’t know what will happen. So instead of thinking that it will be horrible, let’s make a plan for how we can make it easier for you and then we can see what happens when we get the needle”.

For older children/teens, learning how to identify the thinking traps and understanding that these thoughts don’t necessarily represent reality is helpful. Challenging these thinking traps involves reminding children/teens of
other challenging times in their life when they felt worried or anxious and were able to handle and cope with the anxious feeling. Helping youth identify times in their lives when they felt anxious but there was no danger encourages them to see the “truths” (e.g., “Remember when you were scared of your friend’s dog, but then when we met him and all he did was give you kisses”).

More detailed information on challenging anxiety-provoking thoughts can be found here:


5. Ride the Physical Wave of Anxiety – Managing Physical Feelings

Many children have strong reactions to the physical sensations that anxiety can produce in their bodies. The most common way that children feel anxiety is through stomach aches, typically experienced prior to whatever event is causing them to be anxious. Fear of needles or vaccinations can lead to other physical symptoms seen across most anxiety disorders, including nausea, increased heart rate, muscle tension, and dizziness or lightheadedness. Younger children may be more likely to cry, whereas older children or adolescents may become irritable or even aggressive when confronted with an injection or procedure involving needles. Complicating matters further, a small number of people will develop a tendency to faint in response to needles - this occurs when our heart rate and blood pressure drops dramatically after initially being high prior to an injection (called a “vasovagal response”).

Managing physical symptoms is key during the actual procedure and the following strategies should be practiced multiple times in the days and weeks leading up to any medical procedure involving needles.

- For young children, help them learn more about how they feel anxiety in their body so they know what to expect on procedure day. A helpful guide to physical symptoms can be found here:

- For older children and teens, emphasis can be placed on managing their breathing. When anxious, kids tend to either increase their breathing dramatically (which can lead to feeling faint or hyperventilating) or doing just the opposite and holding their breath (which can lead to increased tension). Work with your child or adolescent on slow, consistent, calm breathing at a regular pace. More information can be found here -
  or by using the Anxiety Canada MindShift app, which contains audio recordings of guided breathing techniques your child can listen to prior to or during stressful procedures.

- If your child or teen has a tendency to faint, learning more about applied tension strategies can help counteract fainting (but it does require some practice!):

- Effectively managing pain from needles helps to prevent the development of needle phobia and eases needle fears. Learn more about pain management strategies for children during medical procedures, like the use of topical creams (emla/lidocaine creams or similar), the use of distraction (see the CARD System mentioned in the next section), or having parents assist by modeling calm coping and re-focusing a child’s attention on non-threatening aspects of the procedure (see more on this in the What NOT To Do section below).

6. Being Brave – “Fighting Fear by Facing Fear”

Whenever we get really scared of a person, place, or thing our brains and body kick into survival mode and the “fight or flight” response is activated. We often use this term without really understanding it. Put simply, it means that we tend to avoid what we’re afraid of and choose the “flight” option whenever we can. Children and teens are still developing their brains and struggle with understanding short-term vs. long-term implications of decisions, often defaulting to doing whatever ‘feels best now’ instead of what’s best in the long-term, so avoiding an injection that MAY be painful
NOW makes sense in their minds! In some situations, it’s tough to run away or avoid, so the “fight” comes into play and children or teens can become aggressive and resist their procedure involving needles. This can lead to a number of stressful, dangerous, and anxiety provoking situations - most often situations where children are held down or restrained in order to successfully complete the procedure. This is traumatic on everyone involved - the child, the parent, and the medical team - and can lead to future problems with medical procedures where children fear situations they have no control over and can lead to avoidance of needed medical care, even as adults.

Avoidance is truly problematic as it fuels anxiety in both the short and long term. Avoidance makes anxiety worse.

Whenever possible, the goal with anxiety should always be about moving TOWARDS what we are afraid of and NOT avoiding it. In other words, we “FIGHT our fears by FACING our fears.” In the majority of cases our anxiety OVERESTIMATES how bad an event will be, so when we actually face our fears and engage in that behavior or event (like getting a vaccine/needle) our brains learn “It wasn’t that bad” and over time our anxiety begins to decrease rather than continue to get worse if we avoid. We call this “exposure” and it’s been shown through research to be the key element of reducing anxiety regardless of what we’re afraid of. By slowly exposing children, in a controlled and gradual way, to the things about needles that are scary (often the look of needles/syringes can be very frightening for children) we start to build a tolerance to our distress (“getting comfortable feeling uncomfortable”) and in time many children are proud of themselves for “being brave!” in the face of fear.

Children sometimes struggle to understand why we need to engage in these exposure exercises, so it can really help to use a simple metaphor or analogy like “Instead of playing defense against Mr. Worry, we’re going to go on offense!” For some children this can make approach-behaviors more fun and relatable. Young children can “fight their Worry Monster!” or “Take control back from the Worry Bully!”

Lastly, it’s important we focus on being brave and not on ‘liking needles.’ At times parents can expect children to show NO fear with needles and this is
simply unrealistic. Our goal is not to like needles, like getting a vaccine, or like medical procedures that are uncomfortable. Our goal is to be brave, tolerate some discomfort, and do what matters to us and our loved ones.

For more information on how to use exposure-based exercises, please refer to the following Anxiety Canada Resource documents so you can learn about helping your child be brave and develop exposure exercises with them:

- [https://www.anxietycanada.com/sites/default/files/FacingFears_Exposure.pdf](https://www.anxietycanada.com/sites/default/files/FacingFears_Exposure.pdf)
- [https://www.anxietycanada.com/sites/default/files/Fear_Ladder_Form.pdf](https://www.anxietycanada.com/sites/default/files/Fear_Ladder_Form.pdf)

7. What NOT to Do: Parenting Strategies and Myths

Before mentioning myths and problematic solutions, one effective way parents can make a difference is by using the CARD system, a science-backed method that helps parents and kids plan for coping before, during, and after a vaccination to manage pain and distress. It stands for Comfort Ask Relax Distract and more information can be found here - [https://www.anxietycanada.com/wp-content/uploads/2020/04/CARD-for-Parents-and-Caregivers.pdf](https://www.anxietycanada.com/wp-content/uploads/2020/04/CARD-for-Parents-and-Caregivers.pdf)

Common things parents do when trying to be helpful, but can actually make things worse are:

1) **Keeping Secrets:** Not telling a child about a needle procedure until the very last minute is common, with parents believing their child may “unnecessarily stress and be anxious about it” for days or weeks if they know about a procedure beforehand. If you believe your child or teen will be that distraught for weeks, it’s a good sign that everyone could stand to benefit from developing some coping skills mentioned in this article or seeking professional help where possible. Surprising someone with anxiety typically makes things worse, and generally leads to children not trusting their parents or medical professionals and can lead
to a host of problems on vaccine day (like attempting to run away, fighting with staff, screaming, etc). At a minimum, tell your child about the upcoming procedure a few days beforehand and combine it with a conversation about making a coping plan – how can you work together to make this procedure a positive one.

2) **Providing Excessive Reassurance:** Some children just need a little encouragement to get through tough situations. Helping them understand what typically happens and reminding them they’ll be alright is enough. This is not the case for children with high levels of anxiety, who seemingly can’t get enough reassurance from parents or caregivers. You may have noticed that, at least sometimes, trying to reassure them feels like it’s making it worse. Research actually backs this up with regard to medical procedures, where reassurance is associated with increased child distress and pain. Your facial expression, tone of voice, and what you say may be interpreted by your child as “Something scary is about to happen here!” and they can react accordingly. It’s also worth noting that **many adults have a fear of needles**, and you may want to consider this when deciding which parent or caregiver takes a child to their appointment. While at the appointment, try focusing on coping statements, like “This may be tough but you’ll get through it!” or “I know you’ll be brave – I’m here for you.” Remember that reassurance often feels like a natural parental instinct but in this case it can accidentally signal that there really is something to worry about.

3) **Misleading Children:** One of the most common fears children endorse with needles is “It will hurt!” and for some parents, almost automatically the response is “You won’t even feel it” or “It doesn’t really hurt.” In reality, most injections do hurt for a short period of time and muscle soreness is uncomfortable afterwards. What is important is giving kids the tools to cope with the pain, anxiety, and possible side effects like soreness after the procedure. As discussed in the previous sections, help kids understand that their anxiety often predicts the worst-case scenario (e.g., “This will hurt 10/10 all day!”) whereas reality is often much less catastrophic. Parents can say “Some people say they don’t feel it much at all and others say it feels like a brief pinch, but let’s find
out what it’s like for you.” Try to keep the language neutral where possible.

Educating kids and being open and honest, giving them tools to cope instead of reassurance, and praising them for bravery is a much more effective route for helping children overcome their fear now and into the future.

8. Help Is Out There - Knowing When to Ask

Parenting is tough, and sometimes being a parent and mental health practitioner wrapped into one is too difficult. If you or your child/teen are overwhelmed with managing these concerns through self-management strategies, there are more in-depth ways you can help ranging from things you can do today (like downloading an app) to finding a professional who specializes in treating needle phobia.

**MindShift App – Anxiety Canada:** This free downloadable app ([https://www.anxietycanada.com/resources/mindshift-cbt/](https://www.anxietycanada.com/resources/mindshift-cbt/)) provides education about anxiety, coping statements that kids and teens can use, and guided breathing/relaxation audio clips that can be used during a procedure to help stay calm or distracted.

**My Anxiety Plans (MAP) – Anxiety Canada:** MAP is a resource for parents and caregivers to “coach” anxious children or teens using practical strategies and tools to manage anxiety. MAP includes 6 units with 46 lessons where parents and kids can learn more about anxiety, how to challenge anxious thinking, and how to create exposure-based plans to fight fear by facing fear.

**Mental Health Professionals Trained in Cognitive-Behavioral Therapy (CBT):** Finding the right provider can be tough but don’t be afraid to ask what treatment approach they use (does it focus on exposure-based treatments and cognitive-behavioral therapy or something else?) - here is one resource to find a CBT therapist: [https://cacbt.ca/en/certification/find-a-certified-therapist/](https://cacbt.ca/en/certification/find-a-certified-therapist/)

**Solutions for Kids in Pain (SKIP):** Solutions for Kids in Pain (SKIP) is a national network on a mission to improve children’s pain management
through coordination and collaboration. SKIP is a resource for evidence-based solutions for managing children’s pain, including from needle procedures. 

www.kidsinpain.ca; @kidsinpain; #ItDoesntHaveToHurt

Lastly, it’s important to reward children for getting their vaccine so let’s not forget this. Overcoming fear and anxiety is tough for everyone but it can be especially challenging for young ones. Help them understand that getting a vaccine is part of a bigger picture of keeping everyone safe, including their loved ones. Reward yourself too – it’s always challenging seeing your child in distress so remember that this is helping them develop resilience and teaching children that they can conquer their fears now and well into the future.

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