Protecting the Airways and the Rights of Babies under 12 months of Age.

Most international leaders in the field of Early Aquatics agree that the Rights of Children are violated in some early swimming programs - characterised by forceful and potentially traumatic teaching methods. Whilst only a small minority of swim programs engage in these practices, every child should have the right to be protected from trauma, and experience a developmentally appropriate and positive aquatic education.

Over 30 years I have repeatedly asked "Why doesn't someone do something?" to stop these practices. I have always assumed a government body or child protection agency would step in. I now realise that the "someone" is us, the aquatic education industry, and I urge you to join me in campaigning for stronger enforcement of industry standards and recognised best practice.

Effective industry self-regulation requires specific, enforceable, Codes of Conduct and Practice. Whilst all children need to be protected in swim lessons - and beginners of any age should be taught with patience and respect - babies under 12 months are the most vulnerable. I hope organisations will adopt similar codes for toddlers 12 months to 24 months, however in this paper I will argue the case for our most vulnerable babies – those under 12 months of age.

In medicine, there is a premise of "do no harm". We must also do no harm in our efforts to make children more skilled around water. Once safe and developmentally sound practices are clearly identified, the wellbeing of our youngest students in swimming lessons can be assured. If other practices are proven to make children safer around water, then let the onus be on those wishing to practice those methods to prove that they "do no harm". If that is proven, then and only then should those methods be considered for inclusion in Industry Codes of Conduct and Practice.

Many organisations have policies for baby and toddler swimming programs – however to be effective they need strength, clarity and most importantly, consistent enforcement. Industry experts must stand and be counted, prepared to advocate for those who cannot speak for themselves.

Proposed Additions to the National Baby Swimming Codes of Conduct and Practice for Babies under 12 months.

When a baby under 12 months is in the back-float position, it is essential that:

1. The baby is relaxed and engaged.
2. The adult is within "Fingertip Reach".
3. The nose and mouth are clear of water.

(* see notes below)

When a baby under 12 months is going underwater, it is essential that:

1. The baby is relaxed and engaged - before and after.
2. The baby is not assisted to go underwater (submerged) against its will.
3. The baby is comfortable with the time underwater, to a maximum of 3 seconds.

(* see notes below)

Duty of Care

Babies under 12 months are still developing in the areas of mobility and communication. Unable to use language, they are limited to crying, body language and facial expressions to verbalise discomfort or fear. Coordination, size, and strength are also factors limiting their ability to protest or protect themselves.

These factors demand a higher Duty of Care. Teachers need a comprehensive understanding of the health and safety implications of aquatic skill development - particularly skills that may compromise the airways of young babies. Unsupported Back Float, and Front Submersion, are 2 common examples of these practices. They require a high level of skill and understanding in the teacher, and readiness in the child.

Maintaining a Clear Airway

Having water over the face is a natural consequence of learning to swim and enjoying the water, however it can also trigger innate fears and anxiety. Fear of suffocation is a primal fear.

Newborn babies have a complex network of reflexes and reactions designed to keep the face and airway clear of obstruction. However, these reflexes cannot reliably protect the baby from ingesting or inhaling water. They are mostly unreliable (integrated) by the time the baby may be in swimming programs (from 4 to 6 months of age).

Reflexes that may close the airway of young children in an accidental submersion or drowning, require water over the epiglottis for more than 3 seconds or cool water submersion - neither of which is acceptable practice in a baby swimming program. Some reflexes also trigger stressful physiological responses, such as increased heart rate and fight or flight response.

Therefore, the assumption that protective airway reflexes can solely be relied upon to protect a baby from inhaling water, is not based in fact. Voluntary breath control is essential to maintain a clear airway. This cannot be achieved without readiness. A distressed or fearful baby does not have readiness.

Water over the Face – when on the Front

Readiness for water over the face must be achieved over time and at the baby's pace. Once the baby can predict water over the face, readiness can be achieved. Allowing the baby time to experiment and imitate care givers is essential.

Young babies often blink once they understand that something is about to touch their face around the area of the nose and eyes … including water. Combined with a relaxed posture and engagement, this blink may signal that the baby is ready for water over the face. It is essential the carers read the baby well, and that the baby can see that water is on the way.

Self-initiated submersion on the front is the easiest way to ensure readiness. Assisted submersions should only be with unquestioned readiness and a carer able to read the baby well. Facial expression and body language must be relaxed both before and after the event. Respect for the baby's willingness to engage in the activity is essential.

When on the front, the mouth and nose are facing downward. Positive air pressure will help prevent water from entering the airways and stomach. With readiness and relaxation, the baby may voluntarily hold its breath and happily stay underwater up to a recommended maximum of 3 seconds. The baby should be assisted to the surface within 3 seconds, as it is possible that it has gone underwater without a full intake of air. The duration underwater should be slowly increased from a full-face dip to a 3 second swim gently, over time, at the baby's pace.

Becoming comfortable with water over the face is an important step toward independent swimming. However, there are many other goals and benefits of aquatic programs for young babies. A good program will take each baby at its own pace, recognising individual fears, preferences and readiness.

Water over the Face – when on the Back

On the back in water, the young baby is vulnerable to unpredictable episodes of water over the face. Without knowing when water will flow over the face, the baby is less able to hold its breath in readiness. This is distressing for the baby and significantly increases the risk of water entering the airways.

Gravity also becomes a factor on the back – drawing water into the mouth and nose as air is displaced. This results in the baby swallowing water to keep the airway clear. Pool water in the stomach may cause the baby to feel uncomfortable, and it is common for babies subjected to this practice to vomit.

It is difficult for a young baby to know when to breathe in back float - exposing an open airway to water that may be flowing over the face. If they are sobbing, crying or calling out when on the back, the airway will be more exposed. At some point they must inhale, risking water in the airways. The baby may cough to clear the airway; however, they may not be able to clear it completely and complications may occur. The complications of even a small amount of water retained in the airways (lungs) can be very serious, and may occur hours after the event.

Toddlers and older children have better control of their breath and posture in the back float position. They are more equipped to avoid water flowing over the face, and are more capable of protecting and clearing the airway. For support to go from "Fingertip Reach" to "Arms Reach" in back float, the toddler or pre-schooler must have readiness - including adequate control of their posture, movement, and buoyancy. It also requires some control and integration of the postural righting reactions which impact body and head position.

Babies under 12 months do not have readiness for water over the face when on the back. They must always have adequate support to ensure water does not flow over the face in back float. In an advanced baby "fingertip reach" may be adequate support. In most babies under 12 months' touch support will be required.

Some Popular Beliefs Around Back Float in Babies

Back float is an important survival skill in water confident toddlers and older children - who have readiness to learn the skill without trauma. Understandably some swim teachers also initially believe that unsupported floating is a valuable goal for babies under 12 months of age. An analysis of common beliefs and facts, shows that it is unreasonable to expect a young baby to achieve unsupported back float without trauma during the learning process. The argument that it is a safety outcome in a baby so young is also unfounded. The end does not justify the means. No baby under 12 months should be placed in a situation where it is required to "self-rescue" in an accidental submersion or drowning, simulated or real.

Belief

Babies under 12 months can back float for more than a few seconds, unsupported, without having been exposed to stressful practices, such as water over the face, during the learning process.

Fact

Postural Righting Reactions generally cause babies to be uncomfortable and unpredictable on the back from as early as 6 months. Additionally, babies under 12 months do not have the cognitive skill to understand the importance of staying still when unsupported in the back float position. They may eventually stay still without support after repeatedly experiencing the distress of water over the face – learning through negative reinforcement. Allowing a baby to experience water over the face in back float is a traumatic and unacceptable practice, comparable to simulating drowning, with unknown potential for psychological harm.

Belief

Unassisted back float makes a baby under 12 months safer in and around water.

Fact

There is no evidence to suggest a baby who back floats independently under 12 months is safer around water. Organisations who quote research claiming this, have not made this research available.

Babies have poor ability to transfer skills from one situation to another (conservation). Therefore, the baby may not perform the skill in a pool that does not look or feel the same. It is also possible that the parent may be less attentive if they believe the baby can "self-rescue". Additionally, it must be considered that a baby who has experienced stressful events during the learning process may be more likely to panic in an accidental submersion.

There are other ways a baby can learn to be safer around water without experiencing stress during lessons. They include always holding hands near water; always swimming in swimwear; never entering the water without an adult inviting them in; and turning to secure the wall on entry.

Belief

Drowning is a significant risk to babies under 12 months.

Fact

Statistics show that babies under 12 months generally do not drown in pools or other large bodies of water. They usually do not have the mobility required to access a pool without an adult, and should be very closely supervised. Once a baby becomes a toddler - over 12 months of age - it is becoming more mobile and adventurous. If back float with support has been gently developed under 12 months of age, it can progress to an independent safety skill for older toddlers in the high-risk category, over 18 months of age.

*** Notes to "Proposed Additions to the National Baby Swimming Codes of Conduct and Practice"**

Relaxed and engaged

Signs that a baby is not relaxed and engaged include: stiff body; clenched fists; open outstretched fingers; crying; sobbing; shaking; not responding; avoiding eye contact; arching back; trying to sit up; calling out; coughing. Babies will not relax and engage if forced, threatened, humiliated, ignored, or coerced. Restraining the child in back float, or pushing a baby under the water, does not mean they are relaxed or engaged.

Fingertip Reach

Fingertip Reach means that an adult is providing adequate support for the baby so that water is not flowing over the face in back float, and the baby is able to relax and engage. Scaffolding is an Early Childhood term for providing the right amount of support at the right time whilst promoting independence. Fingertip Reach means that scaffolding is in action. The adult is close enough to support the child as needed and prevent water from flowing over the face. Having hands more than a few centimetres away from the baby's head in back float would make this untenable.

Nose and Mouth Clear of Water

The baby must not be subjected to water flowing over the nose and or mouth when on the back. Adults must provide the necessary support to prevent this, from full support to Fingertip Reach, depending on the readiness of each baby. Readiness will change from session to session and minute to minute, close monitoring and fingertip proximity are essential.

****This document was produced to assist Australian and International Swimming Education Bodies to review and draft guidelines that promote the wellbeing and safety of babies in swimming lessons. Segments of this document may be used for that purpose without acknowledgement.**