

# CONTROLLED SPORTS MINIMUM AGE

## CONSULTATION FACTSHEET

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### What we're asking

The ACT Government has developed four different options for establishing a minimum age for contestant participation in controlled sports events. This will be implemented as part of reforms to combat sports legislation in the ACT under the *Controlled Sports Act 2019*. We are seeking your views on:

1. How you (in whatever capacity) manage risks of significant injury in sports participation
2. Your understanding of the risks of injury in combat sports and how these are managed
3. Any industry specific feedback regarding the design, structure and content of a regulation on minimum age
4. The similarities and differences between current contest rules and the proposed options (for industry representatives)

### Who we're talking to

- > Children, including those currently participating, or may participate in future combat sports events in the ACT, as well as a broader cohort of children that do not participate in combat sports
- > Parents/ carers, including those with children that are currently participating, or may participate in future combat sports events in the ACT, as well as a broader cohort of parents/ carers with children that do not participate in combat sports
- > Combat sports promoters currently operating in the ACT
- > Combat sporting organisations
- > National Sporting Bodies (for combat sports covered by the legislation)
- > Combat sport gyms and training centres in the ACT
- > Other regulating jurisdictions in Australia (New South Wales, Victoria, South Australia and Western Australia)
- > The Australian Institute of Sport
- > ACT Policing

### Your say matters

Your input is very important.

- > We will consider different perspectives on establishing a minimum age for participation in combat sports events in the ACT
- > We will consider the community's general approach to risk and how it applies to the design of this regulation
- > Your input will influence the Government's decision-making process

# ESTABLISHMENT OF A MINIMUM AGE

## FACT SHEET

### What establishing a minimum age means

Establishing a minimum age in the ACT for participation in controlled sports events will **only apply to events**, it will not apply to the training environment, nor have any impact on after school fitness activities. It will also **not apply to exempted light contact combat sports**, including exempted styles for children where the prescribed techniques are **not used**. This means that where children are using the prescribed techniques, they will not be permitted to participate in events. The government is also considering how a minimum age restriction would be applied to both registrable and non-registrable events.

### Why establish a minimum age?

The *Controlled Sports Act 2019* replaces the outdated *Boxing Control Act 1993* and will commence on 11 October 2019. The legislation was reformed to establish improved safety and integrity practices in line with similar operational rules across other jurisdictions in Australia. This includes considering whether a minimum age for participation in combat sports events as a contestant is appropriate.

While there are a range of physiological and psychological benefits to participating in combat sports, children have unique developmental features that make them more vulnerable to injury, particularly concussion.

Young children also do not fully understand injury risks associated with combative techniques. These factors have been considered when developing the options, including comparisons to other sports with similar risk profiles. This evidence is detailed extensively in the background section of this factsheet.

### Key Questions

- > What is your understanding of the risks and benefits of participating in combat sports?
- > Do you consider participating in combat sports events to be more or less risky than participating in combat sports activities in the gym? Why/why not?
- > Do you think there should be special measures in place for children participating in combat sports? If so, what?
- > Are the prescribed techniques adequate? Are there others that should be included? Why?
- > Are there any prescribed techniques that should be removed from the proposed options? Why? How do you propose the safety aspects of using these techniques should be managed for children?

### Proposed options

Relevant research and current industry practices were considered when developing the options below. This consultation will provide valuable input to Government when selecting the most appropriate option for the ACT.

**Option One:** Prohibit children under the age of 14 from using prescribed combative techniques that have contact with the head, neck, spine or groin

Under this option, children are permitted to compete in combat sports, but are prohibited from using the prescribed techniques in contests until they are 14 years old.

Based on research, the prescribed combative techniques could include:

- > Strikes to the head
- > Chokeholds
- > Strikes to the spine and kidneys
- > Joint locks
- > Throws and takedowns, if child has not yet demonstrated competence falling safely

Once children are 14 years old, the prohibitions on using the prescribed combative techniques in contests will be removed. From this age, children can use whichever combative techniques are permitted by their relevant sporting association or rules adopted by the promotion.

This option recognises a child's ability to appreciate risk at age 14 and allows for contest participation in a controlled environment under this age. This means that children will still be able to participate in contests that do not use the prohibited techniques (including those exempted from legislation for being light contact combat sports), therefore not inhibiting their exposure to the contest environment and supporting elite pathways where applicable.

**Option Two:** Minimum age set by authorised controlled sports bodies, subject to approval by Minister on the recommendation of Advisory Committee

Under option two, decisions on the minimum age to compete in each combat sport will be made by the Minister for Sport and Recreation and the Advisory Committee upon application from sporting bodies.

Industry bodies will set the minimum age to compete in combat sports events by setting age limits in their contest rules. The Registrar will consider the appropriateness of these rules when approving draws that feature child contestants. This gives the Registrar the power to withhold approval where a sporting body's rules surrounding children's participation are considered inappropriate or unsafe. Once an organisation has been recognised as an approved controlled sports body, the Registrar will approve events held in accordance with the approved body's rules. This may include a condition of Authorised Controlled Sports Body approval on the rules that they apply only above a certain age category.

This option may result in inconsistent application of a minimum age across different styles of combat sports, as each application will be considered on its individual merits and detail. It could however, make it more difficult for industry to plan events with clear and consistent expectation of age requirements.

**Option Three:** Set a standard minimum age of 14 years with prohibition on techniques that have contact with the head, neck, spine or groin; but

allow sporting organisations to apply for an exemption for their sport for non-registrable events

This option sets the minimum age for using particular techniques at 14 years old. Prior to 14 years, children will be prohibited from using techniques in the contest environment that include:

- > Strikes to the head
- > Chokeholds
- > Strikes to the spine and kidneys
- > Joint locks
- > Throws and takedowns, if child has not yet demonstrated competence falling safely

This option would then allow for an authorised controlled sports body (for non-registrable events) to apply for an exemption from the prohibition of one or all of the above listed techniques. The authorised body will be required to supply evidence as to why the restriction should not be applied for their organisation, and could include factors such as:

- > Expertise (including medical expertise) available at events
- > Rules for the particular combat sport/s
- > Safety record
- > Other safety measures used, such as personal protective equipment, shorter bouts and longer breaks
- > Elite pathways impact
- > Medical evidence to support claim

The Registrar will refer applications to the Advisory Committee for advice before seeking approval from the Minister for Sport and Recreation.

This raises the risk of inconsistent application of rules creating confusion and delay for attending medical practitioners and inspectors, who will need to have a good understanding of who and how these specific exemptions apply. Inconsistent rules mean that for example, a referee who provides their services to multiple combat sports events in the ACT, will need to observe multiple sets of rules relating to children (for example, there are two separate kickboxing sporting bodies operating in the ACT. If one has an exemption and the other does not (for instance, if they have never applied for one) – the referee must make quick decisions based on two different sets of rules). While this may be easy to determine in regular situations, it could create confusion in emergencies or times where a particular contest is progressing quickly.

**Option Four:** Set a standard minimum age of 14 years with prohibition on techniques that have contact with the head, neck, spine or groin; but allow sporting organisations or individual athletes to apply for individual exemption based on elite athlete status (or promising status) for non-registrable events

This option is similar to option three, but allows for exemptions for individuals based on their skill level and potential to become an elite athlete in their chosen combat sport/s. Without this exemption, children under the age of 14 can compete in contests that do not allow the prohibited techniques:

- > Strikes to the head
- > Chokeholds
- > Strikes to the spine and kidneys

- > Joint locks
- > Throws and takedowns, if child has not yet demonstrated competence falling safely

Given that most sporting organisations allow a maximum of a two-year age gap between contestants under 18 years of age, this model would allow some 12-year olds to participate with special exemption, but most likely exclude those under 12 years using the prescribed techniques (i.e. those that allow contact with the head, neck, spine or groin).

This particular model will address concerns about multiple sets of rules (as detailed under option three), as the approval for the under 14-year olds will be made on the basis that they can compete unimpeded in over 14-year-old contests (with requirements for suitable matches always applying), therefore not requiring modified rules.

This also addresses potential concerns about inhibiting elite pathways through this rule, and builds in a review mechanism for young athletes, so as not to discourage their participation.

## What next

All feedback will be considered by the ACT Government as part of the decision on whether to establish a minimum age for participation in combat sports events in the ACT and what this would look like. A regulation will then be drafted and considered by the Minister for Sport and Recreation. The regulation will be finalised in August 2019 and become law. It will then take effect when the new Act commences on 11 October 2019.

# Background

## Minimum age restrictions in other Australian jurisdictions

Combat sports are not regulated in Queensland or the Northern Territory. As such, there is no set minimum age to compete as a combat sports contestant in either jurisdiction and the sports are self-regulated. Tasmania has minimal regulation, and therefore is not represented below.

In regulating jurisdictions (VIC, NSW, SA, TAS and WA), professional contestants must be at least 18 years of age. Contestants must also be at least 18 years old to compete in a cage.

Regulating jurisdictions do not share a consistent approach to the minimum age to compete in combat sports events, as outlined in Table 1.

**Table 1 – Minimum ages in regulating jurisdictions**

Victoria	New South Wales	Western Australia	South Australia
> Unknown establishment date	> Established in 1998	Established in 2012	Established in 2000
> 10 years old	> 14 years old for regulated combat sports (boxing, kickboxing, MMA, and Muay Thai)	> Different minimum age for each regulated sport determined by a sliding scale of risk	> No set minimum age
	> Self-regulated minimum age for exempt sports (e.g. 6 years old for Brazilian Jiu Jitsu)	> BJJ, Taekwondo & Wrestling – 6 years > Boxing – 10 years > Kickboxing & Muay Thai – 12 years > Shooto – 16 years > MMA – 18 years	> Contest rules must be approved by the Minister, on recommendation of an Advisory Committee

## Comparison to other sports

Some stakeholders have stated that the Government is treating combat sports differently to other sports, such as rugby. Some combat sports advocates argue that contact sports purport a similar risk of head injury as combat sports.

While it is true that the Government does not regulate rugby in the same manner, the industries are quite different. There are many varieties of combat sports and significant industry fragmentation resulting in inconsistent rules across combat sports and sometimes within singular combat sports. For example, amateur and professional boxing are governed by two different organisations. In other combat sports, some promoters/ event organisers do not affiliate with the national body due to disagreements about governance, meaning different promotions have different contest rules.

This increases the risk for participants as inconsistency in rules can create confusion, particularly in a small sector such as the ACT where many officials deliver their services to multiple providers. From a safety

perspective, other sports have taken measures to improve the safety of players, particularly young players. For instance, Rugby Australia has size for age guidelines requiring children between the ages of 10 – 15 that fall above or below height and weight parameters for their age group to undertake an assessment by an independent assessing coach to determine their grade.<sup>i</sup> This is similar to matchmaking in combat sports where weight, height and skill are matched for contests.

Rugby Australia has also banned tackling and fending for under 7s games. Restrictions on the types of tackle then apply, with a gradual lifting of restrictions to under 15s.<sup>ii</sup> Players are immediately removed from play for a suspected concussion and must undergo a mandatory medical assessment and gradual return to play.<sup>iii</sup> This differs from combat sports, where a contestant with a suspected concussion may be able to continue the contest after passing the 'count', where they are given time rise to their feet and continue the contest after being knocked down, or knocked out. Similarly, high tackles involving the neck are illegal. Typical concussion guidelines therefore do not apply to combat sports.

Other sports that have an element of risk also apply age guidelines, though it is difficult to determine how safety has factored into these decisions. For instance:

- > BMX Australia allows children from age two to participate in BMX bicycle racing on a balance bike; children can then progress to a pedal bike when ready, and after eight years the contestants bike size determines class; superclass (comparable to professional) is open to children above 15 years, rising to 16 years in 2020. Full face helmets (i.e. motorbike helmets) are required from pedal bike stage.
- > Children can participate in motocross (motorbike sports) from seven years of age, with road-racing permitted from 11 years if satisfied of confidence.
- > Children's drag racing was suspended indefinitely in WA after an eight year old girl died in a test race to qualify for her racing licence. Children's cars were able to travel at 96km/h. Full head helmets were required. Drag racing does not occur in the ACT.
- > Children are able to participate in equestrian contests through Equestrian Australia from age 12. From ages 14 – 18, children compete as juniors. Protective headgear must be worn during training and competition for all children under 18 years. Falls, kicks and crush injuries can lead to serious injuries and fatalities.

The legislation allows for the ACT Government to regulate other sports if the need arises. This will be determined on a case by case basis.

## Medical Evidence

Changing the rules and regulations of contact sports can have a 'significant effect' on injury rates,<sup>iv</sup> and is recommended by organisations including Brain Injury Australia.<sup>v</sup> Concussions are 'particularly concerning in children and adolescents, because there is evidence that a child's brain is more vulnerable to injury and recovery from concussion is prolonged compared to adults'.<sup>vi</sup> This may be due to children's 'greater head-to-body ratio and weaker neck muscles, combined with their relative nervous system immaturity, lesser myelination, and thinner frontal and temporal bones'.<sup>vii</sup> Research tells us that children and young people consequently 'have a lower threshold for concussion compared to adults and take longer to recover; after concussion their capacity to participate in schooling is compromised'.<sup>viii</sup>

The American Orthopaedic Society for Sports Medicine notes that children's social and educational development and ability to learn new information may 'suffer a negative impact even after one concussion'.<sup>ix</sup> Concussion can impair elements of adolescent's cognitive functioning for up to two months.<sup>x</sup>

Some studies have linked repeated concussions with development of the neurodegenerative disease chronic traumatic encephalopathy (CTE), only diagnosable post-mortem.

A 2011 study conducted by the Centre for Injury Research and Policy at the Research Institute at Nationwide Children's Hospital in the United States compared boxing injuries from 1990 to 2008 in persons aged six years and older.<sup>xi</sup> The researchers 'expected a smaller proportion of concussions/closed head injuries among younger boxers, since they generate a lower punch force'. However, the study found children aged 12-17 years old suffered a similar proportion of concussion/closed head injuries to groups aged 18-24 years old and 25-34 years old. This is a concerning result given younger boxers are subjected to additional safety requirements such as headgear, gloves and shorter bouts, which should decrease their injury risk relative to other age groups.

A longitudinal study of child Muay Thai boxers in Thailand found that there was a decrease in IQ the longer the child boxed, and found significant brain markers indicating damage. This included white brain matter damage, loosening of brain tissue, accumulation of blood product, and decreased memory function.<sup>xii</sup>

Another study found amateur boxers who competed in a bout wearing headgear and gloves had increased levels of neuronal and astroglial injury markers compared with controls and boxers who had rested.<sup>xiii</sup> This is often the approach developed in combat sports as a way to reduce the risk of these injuries. Contest rules set by combat sports associations often include other safety measures to reduce children's injury risk. For example, weight matching, shorter bouts, mandatory recovery periods for injury as well as the use of protective equipment.

Studies have demonstrated that headgear is unable to prevent concussion and instead only protects from superficial injuries to the head and face<sup>xiv</sup>. Shorter bouts and rest periods may have some impact on reducing the harm as they reduce the exposure time to the risks.

Injury risks also vary across combat sports. Studies have demonstrated that full-contact combat sports such as boxing have higher injury rates than no or light-contact combat sports (such as Aikido, Fencing and some non-contact forms of Kung Fu Wushu)<sup>xv</sup>. The legislative framework accommodates for this and allows light contact combat sports to be completely exempted from the legislation (upon application) under Section 8 of the Act. If exempted under Section 8, a combat sport (or style of combat sport) would not be subject to the minimum age policy as the sport or style is exempted from all requirements of the Act.

Field studies also indicate that the age that children develop competency to make informed decisions about medical treatment is around 14 years. A study conducted by Doctors Weithorn and Campbell found that, in general, children aged 14 years old demonstrated the same level of competence to consent to medical treatment as those aged 18 years and over.<sup>xvi</sup> This indicates that a child may be mature enough to appreciate the medical risks involved with consenting to medical procedures at roughly 14 years old. This suggests that a child may be able to better comprehend the medical risks of participating in combat sports at this age. This consultation will further explore this by talking with children about their comprehension of risk generally, and their risk of participating in contact sports, including combat sports.

Further, the age of criminal responsibility under the *Criminal Code 2002* (S26) is set at 14 years of age (between 10 and 14 the child must know the conduct was wrong to be criminally responsible). This supports evidence that children's competency to understand risks (and therefore consequences) is not fully developed until age 14.

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- <sup>i</sup> Rugby Australia (2018), "Age Grade Dispensation Procedure" <<http://www.rugbyau.com/-/media/rugbyau/documents/rugbyaustraliaagegradedispensationprocedure.pdf?la=en&hash=FD2F254A12CFEB82EBD40B631A707BB2>> accessed 5 March 2019.
- <sup>ii</sup> Ibid.
- <sup>iii</sup> Rugby Australia (2018), "Rugby Australia Concussion Procedure (Rugby Public – Standard Care Pathway)" <<http://www.rugbyau.com/-/media/rugbyau/documents/rugbyaustraliaconcussionmanagementprocedure.pdf?la=en&hash=9B910F36360AD276106BF25961EB1FC2>> accessed 5 March 2019.
- <sup>iv</sup> Vriend, Ingrid et al. (October 2017) "Intervention Strategies Used in Sport Injury Prevention Studies: A Systematic Review Identifying Studies Applying the Haddon Matrix", *Sports Medicine*, Vol. 10:2027-2043.
- <sup>v</sup> Dr Elkington, Lisa, and Dr Hughes, David (May 2016), *Australian Institute of Sport and Australian Medical Association Concussion in Sport Position Statement*, p20.
- <sup>vi</sup> See Field M, Collins MW, Lovell MR, Maroon J. (2003) "Does age play a role in recovery from sports-related concussion? A comparison of high school and collegiate athletes." *J Pediatr*. Vol 142(5):546 –553; McCrory P, Collie A, Anderson V, Davis G. (2004) "Can we manage sport related concussion in children the same as in adults?" *Br J Sports Med*. Vol. 38(5):516 –519; Canadian Paediatric Society (2006). "Identification and management of children with sport related concussion", *Paediatr Child Health*. Vol. 11(10):420–428; Sim A, Terryberry-Spohr L, Wilson KR. (2008) "Prolonged recovery of memory functioning after mild traumatic brain injury in adolescent athletes", *J Neurosurg*. Vol 108(3): 511–516.
- <sup>vii</sup> Caine, D, Purcell L and Maffulli. Citing Caine D, DiFiori J, Maffulli N, (2014) "The child and adolescent athlete: a review of three potentially serious injuries", *BMC Sports Science, Medicine and Rehabilitation* Vol. 6:22, 4, Citing Guskiewicz KW, Valovich McLeod TC: (2011), "Pediatric sports-related concussion", *PM&R* Vol. 3:353–364.
- <sup>viii</sup> S Abrahams et al. (September 2016) "Risk factors for sports concussion: an evidence based systemic review", cited in Queensland Brain Institute, "Submission to the State Parliamentary Finance and Administration Committee Inquiry into: How to improve health and safety outcomes for combat sport contestants in high risk professional and amateur contests in Queensland" <<https://www.parliament.qld.gov.au/documents/committees/FAC/2016/16-CombatSports/submissions/005.pdf>> (accessed 12 January 2018).
- <sup>ix</sup> American Orthopaedic Society for Sports Medicine et al. (2008) "Selected Issues for the Adolescent athlete and the team physician: a consensus statement", <<https://www.sportsmed.org/AOSSMIMIS/members/downloads/education/ConsensusStatements/AdolescentAthlete.pdf>> 15.
- <sup>x</sup> Brain Injury Australia citing Howell D., Osternig L., Van Donkelaar P., Mayr U., Chou L-S. (2013) "Effects of Concussion on Attention and Executive Function in Adolescents", *Medicine and Science in Sports and Exercise* 2013; 45(6): 1030-7. Gera
- <sup>xi</sup> Potter M, Snyder A and Smith G. Boxing Injuries Presenting to US Emergency Departments, 1990-2008. *American Journal of Preventative Medicine*. 2011. Volume 40, Issue 4.
- <sup>xii</sup> Laothamatas, Jiraporn et al. (2018), *Child Muaythai Boxing: Conflict of Health and Culture* in *Journal of Injury Prevention* Vol. 24:A126.
- <sup>xiii</sup> Potter M, Snyder A and Smith G. (2011), "Boxing Injuries Presenting to US Emergency Departments, 1990-2008", *American Journal of Preventative Medicine*, Vol. 40 (4): 465, citing Zetterberg H, Hietala MA, Jonsson M, et al. (2006), "Neurochemical aftermath of amateur boxing", *Arch Neurol* Vol.36(9):1277– 80.
- <sup>xiv</sup> Demorest RA, Koutures C, (2016), "The Council on Sports Medicine and Fitness. Youth Participation and Injury Risk in Martial Arts", *Pediatrics*, Vol. 138(6): 7.
- <sup>xv</sup> Ibid: 1.
- <sup>xvi</sup> L Weithorn and S Campbell (1982), "The Competency of Children and Adolescents to Make Informed Treatment Decisions", *Child Development* Vol. 53:1589.