







29th July 2016

Professor Allyson Pollock
Professor Eric Anderson
Sport Collision Injury Collective
sportcollisioninjurycollective@gmail.com

Dear Professor Pollock, Professor Anderson

RE: Open Letter: Preventing injuries in children playing school rugby

We, the four UK Chief Medical Officers, have discussed your correspondence before replying to your original open letter.

We thank you for raising this matter with us and bringing your work to our attention. Having considered your letter and the evidence enclosed we sought advice from the UK CMOs Physical Activity Expert Group. Enclosed is the response we received from the chair of the expert group Professor Charlie Foster.

The view of the expert group committee is clear:

"The Committee reject the call to ban tackling, do not feel rugby participation poses an unacceptable risk of harm and could not support any actions that would increase inequalities in participation. We think the benefits of experiencing, learning, training and playing rugby, with appropriate supervision, safety and coaching, considerably outweigh the risks of injury."

We also note research published in the *British Journal of Sports Medicine* on the 20th of June which supports the conclusions of the expert group. ¹

As UK CMOs it is our view that the evidence does not support the conclusions and recommendations laid out in your open letter.

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¹ Tucker, Ross, Martin Raftery, and Evert Verhagen. "Injury Risk And A Tackle Ban In Youth Rugby Union: Evaluating The Evidence And Searching For Targeted, Effective Interventions". *British Journal of Sports Medicine* (2016)

We of course continue to champion and encourage study into the long and short term health impact of contact sports on children and adults and hope you continue to work in this area.

Kind regards

Professor Dame Sally C Davies Chief Medical Officer, England

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Dr Chris Jones Acting Chief Medical Officer/Medical Director NHS Wales

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Catherine Maldermad

Dr Michael McBride Chief Medical Officer, Northern Ireland

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Dr Catherine Calderwood Chief Medical Officer, Scotland

UK Physical Activity Expert Group – Response to Sports Collision Injury Collective (SCIC) Letter for UK CMOs

Background

The UK CMOs received an open letter to the UK Government and the devolved administrations from the Sports Collision Injury Collective (SCIC), calling for a ban on contact rugby for school age children. The letter cites the dangers of long-term injury to young people, such as concussion, spinal injury and ligament damage and the loss of school time due to injury. The letter makes five specific "evidenced" claims, followed by two views on (i) injury surveillance, (ii) human rights of the child, and concludes with three requests, one to the UK CMOs, one to the Children Commissioners and one to government ministers.

The UK Physical Activity Expert Group was invited to consider the evidence presented in the SCIC letter, and to draft a response for consideration by the UK CMOs. The Committee has a wide membership of experts from physical education, teacher education, emergency care, sports science, sports medicine, MSK, paediatrics, epidemiology, nursing, health visitors, and high performance/elite sports medicine. Views were sought across a range of relevant committee members. This paper presents specific responses to the five points of evidence and general points to their views and conclusions. We conclude with summary assessment of the Expert Committee members and other specialists on the evidence used within and behind the SCIC Letter.

Overview of the evidence used in SCIC Letter

The SCIC letter adopts a position that singles out rugby as a sport that carries both a high risk of injury and a risk of serious injury for under 18s. This letter is supported by published evidence of injury incidence, severity and cause. The letter asserts that compulsory contact rugby will encourage children to stop playing sport, and also exposes children to harmful contact. The letter does not list the educational, health, social or mental health benefits of participation and as a result is selective in its reporting of data. Evidence on the benefits of experiencing, learning, training and playing rugby, with appropriate supervision, safety and coaching, and physical activity were not included.

Specific responses to five points of evidence

1. First, rugby is a high-impact collision sport. Studies show that the risks of injuries for those aged under 18 years are high and injuries are often serious.

The incidence of rugby injuries (per 1000 playing hours) is higher than other sports but the true incidence remains contentious. The letter stresses the rates are high but

from their own work acknowledge that this is an imprecise estimate, due to the between and within study heterogeneity (I² statistic 98.3%). Their meta-analysis was well-conducted and presented estimates with a prediction interval, but had statistical limitations. The width of the prediction interval indicated potential bias from different case definitions of injury, and more importantly publication bias. There is much uncertainty in their estimate. At present there is an absence of complete person-hours measures of exposure in children that includes, school, recreational, training, game and play based rugby that would permit comparison with other sports that involve physical contact.

2. Second, many secondary schools in the United Kingdom deliver contact rugby as a compulsory part of the physical education curriculum from age eleven.

We agree that PE is a compulsory part of the National Curriculum however rugby is not stated as a compulsory part of the PE offer (KS3, KS4).

Indeed the greatest risk of injury at school is not from participation in sport but in other areas of school life. The HSE RIDDOR data (2005) reported the contribution of games (of which rugby would be one contributing sport) to the proportion of reported non-fatal injuries for primary and secondary school students were 14% to 31%. This contribution is at most one third (at secondary school age) of the injuries within school time and playground injuries were twice as prevalent as games injuries (HSE 2005). Injuries at secondary schools in outdoor PE (which will include other sports than rugby) are less frequent than injuries in inside sport, playground and classrooms. Not all sports injuries to pupils are reportable under RIDDOR, as organised sports activities can lead to sports injuries that are not connected with how schools manage the risks from the activity. The HSE advise schools if an accident that results in an injury arises because of the normal rough and tumble of a game, the accident and resulting injury would not be reportable. Clearly schools, teachers and coaches have a duty of care for children at all times. Rugby has been taught for many years in schools and teachers are very aware of the importance of adequate coaching, contact free games and gradual introduction of contact when appropriate. We would support initiatives to improve the training and coaching of key skills i.e. correct body position and movement techniques for tackling, rucking, mauling etc.

Sport contributes significantly to physical activity in children but does begin to decline from 12 years of age. Participation is also differential by inequalities (IMD) and sport contributed proportionately less with increasing deprivation. Reducing opportunity for children to play rugby in schools would potentially increase these inequalities in participation.

3. Third, the majority of all injuries occur during contact or collision, such as the tackle and the scrum. These injuries which include fractures, ligamentous

tears, dislocated shoulders, spinal injuries and head injuries can have shortterm, life-long, and life-ending consequences for children.

We agree that serious injuries can occur during contact or collision. We welcome the RFU's CRISP (Community Rugby Injury Surveillance Project) initiative which is now monitoring injuries at community level, and show the implementation of a rugby based injury surveillance system. The CRISP 20154-2015 Report states that *the majority of community rugby injuries are sustained in the lower limb, particularly to the knee, ankle and thigh, and the majority of upper limb injuries occur in the shoulder,* (p 3).

4. Fourth, head injury and concussion is a common injury and repeat concussion is more likely when a player has a history of a previous concussion. A link has been found between repeat concussions and cognitive impairment and an association with depression, memory loss and diminished verbal abilities, as well as longer term problems. Children take longer to recover to normal levels on measures of memory, reaction speed and post-concussive symptoms than adults.

Concussion has wide ranging effects on the developing brain and body. There are rare cases of second impact syndrome and therefore player, coach and teacher education on concussion has been significantly increased. Following this increase in awareness there has been a large increase in head injury reporting from school children as they and their parents are concerned about concussions. It seems that before the sustained programme of education and awareness in rugby concussions were under reported, and it may be now that true concussion is over-reported, making it currently difficult to ascertain where the true incidence lies.

Rest and recovery strategies are internationally accepted by the world wide governing body (World Rugby) following advice from the International Head Injury Board working across all sports. In addition, education on recognising, removing, recovering and returning to play following concussion is far better understood and is actively part of the RFU's approach to risk reduction and management (i.e. <u>Head Case</u>).

5. Fifth, studies show that injuries from rugby can result in significant time loss from school. Rugby injury, disillusionment with the game and interference with education, are the most common reasons for children giving up rugby.

Injuries among 10-19 year olds occur most frequently in school, public places, sports and roads. All injuries will have some impact on schooling but we are unsure what data supports this assertion. We were unable to find any coherent body of research to support the assertion that *Rugby injury, disillusionment with the game and interference with education* caused children to give up rugby. We did find research

on reasons to stop playing sport and become less active for teenagers, which might be connected to negative experience of PE at school, lack of a range of choices for physical activity and peer pressure.

General Points to views and conclusions

1. the absence of a comprehensive system for injury surveillance and primary prevention

This assertion appears unfair as recent Home Nation rugby football unions initiatives are focusing on prevention and monitoring. Routine assessment and recording of injuries caused by sport at Emergency Departments is sporadic and varies in quality. The Committee's A&E and Paediatric medicine specialists felt that this type of recording was unlikely to change or improve in the future, as it was not a clinical priority. One of the few examples of injury surveillance, from Oxfordshire, showed that rugby was not the largest contributor to injuries in the under 20s who play sport. From approximately 21,000 attendances by under 20s, 11,662 were for sport related injuries (70% male). Of these sport related injuries, the main sports were football (28.8% of sport injuries recorded), rugby union (9.6%) and horse-riding (4.6%). For males only the main sports were football (37.9%), rugby union (12.7%) and rugby league (3.9%). For 10-14 year old males, the most frequently sport injured group, football was responsible for 35.7% of injuries, rugby union 17.6% and rugby league 6.1% (Key sport injury figures from Oxford University Hospitals NHS Trust data collected between 01 Jan 2012 and 30 Mar 2014).

2. Also under the United Nations Convention on the Rights of the Child (Article 19), governments have a duty to protect children from risks of injury: "States Parties shall take all appropriate legislative, administrative, social and educational measures to protect the child from all forms of physical or mental violence, injury or abuse, neglect or negligent treatment...". As a party to the Convention, the UK must ensure the safety of children.

We feel this assertion lies outside of the scope of the Expert Committee however not allowing children to play or be active will be detrimental to their emotional, social, mental and physical health.

Three requests for action from the SCIC

- 1. the Chief Medical Officers to advise the Ministers and Childrens' Commissioners in accordance with the evidence;
- 2. the Childrens' Commissioners to protect children from the risks of harmful contact in school rugby; and

3. the Ministers to remove the tackle and other forms of harmful contact from school rugby.

The Committee does not think there is any case to meet these requests.

Summary

The Committee are confident that there is selection bias in the evidence used by the SCIC to present their case. Their position based on such evidence is not supported by the Committee. The Committee reject the call to ban tackling, do not feel rugby participation poses an unacceptable risk of harm and could not support any actions that would increase inequalities in participation.

We think the benefits of experiencing, learning, training and playing rugby, with appropriate supervision, safety and coaching, considerably outweigh the risks of injury.

Professor Charlie Foster

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With additional support from:

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