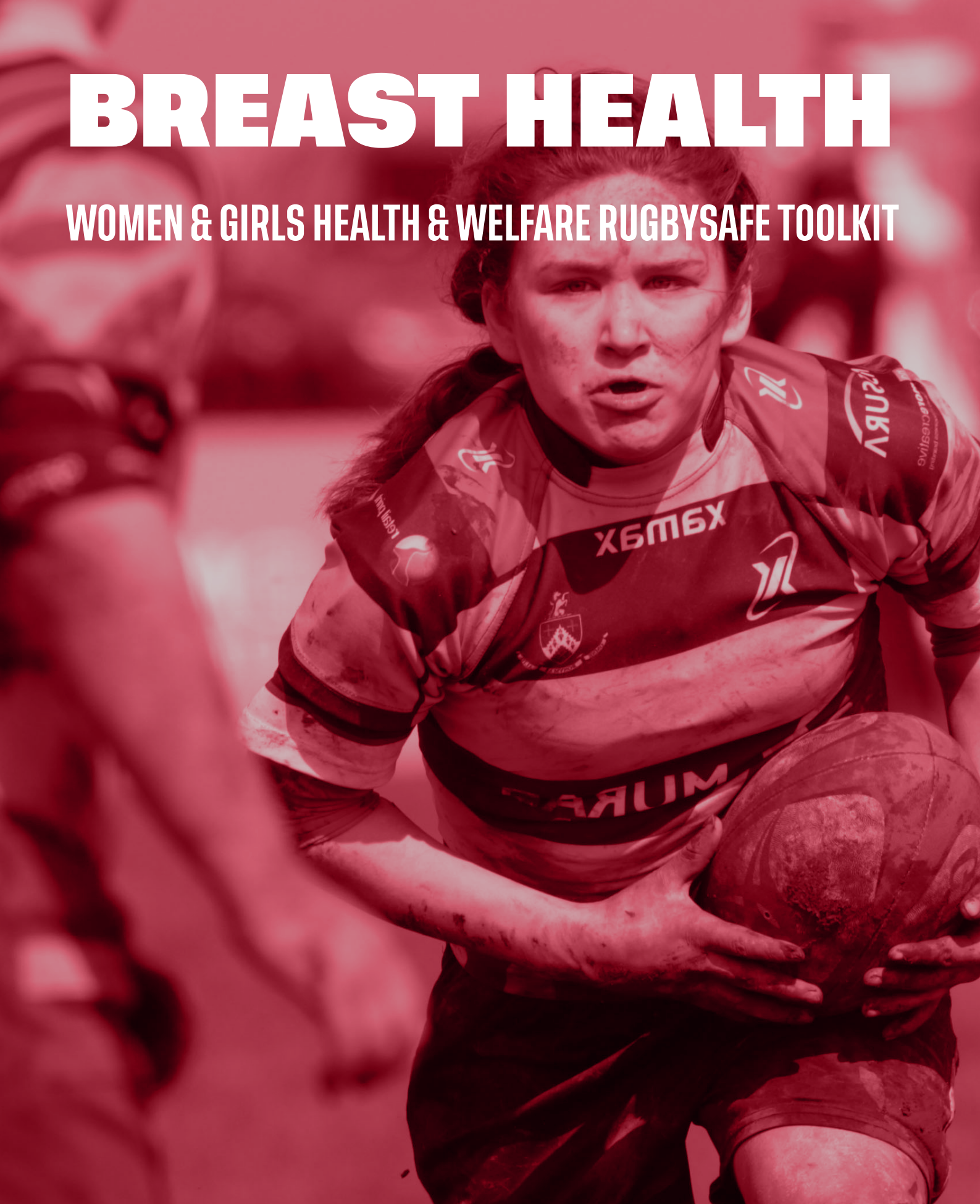


# BREAST HEALTH

WOMEN & GIRLS HEALTH & WELFARE RUGBYSAFE TOOLKIT



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# 1. What is a breast?

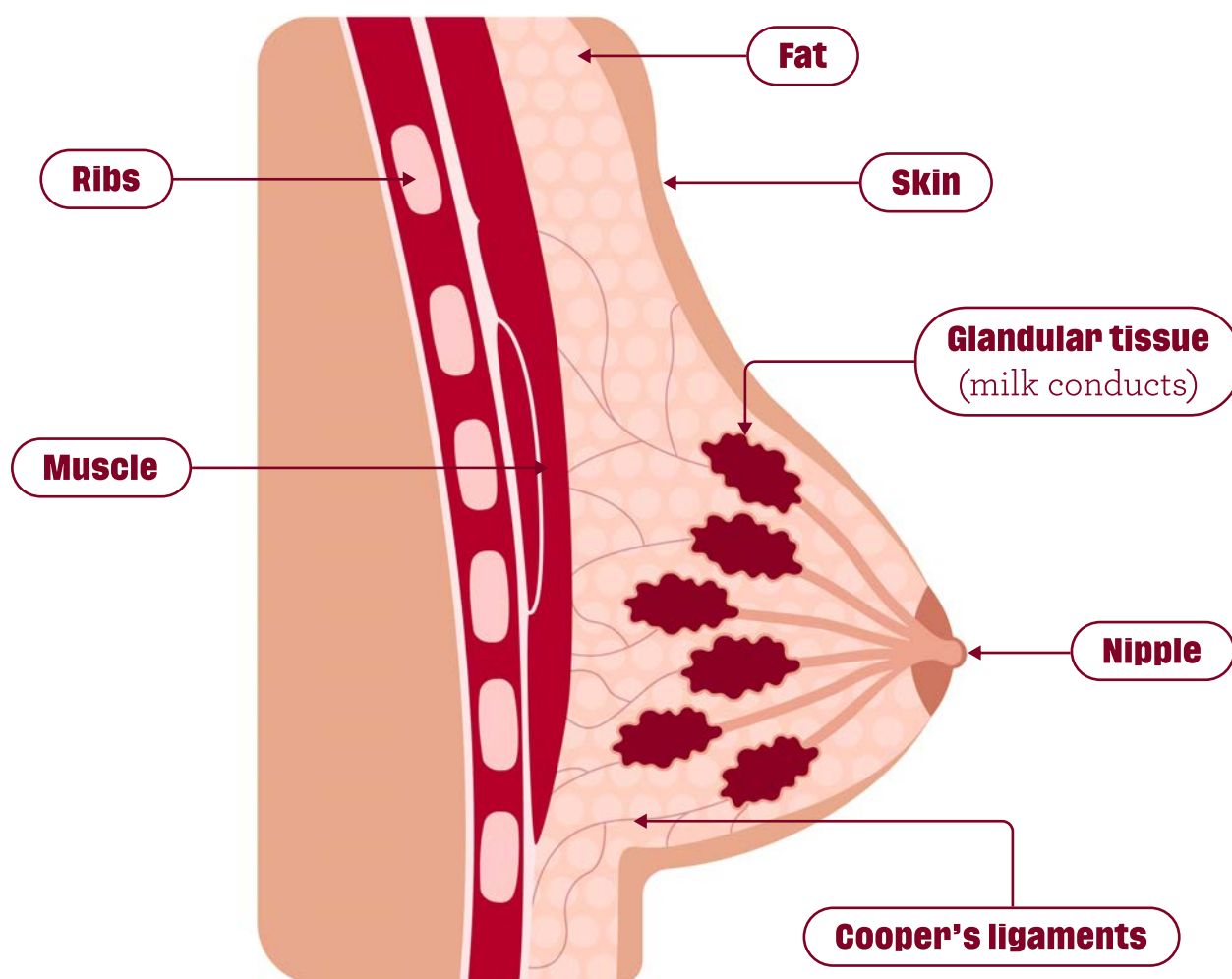
The breast is made of fat and glandular tissue, and does not contain any muscle. With only two weak supporting structures, the skin and the Cooper's ligaments the breast is highly deformable.

The lack of natural support in the breast means that when we move, the breast moves. This **movement exerts a load/force** on the supporting structures within the breast.

Within rugby the challenge this presents can be divided into two problems:

## 1 Breast movement

## 2 Breast impacts




**These problems are easier to manage with a better knowledge and understanding of how and why the breast moves, and potential solutions in how to minimise this.**

# 2. Breast Movement

## Why breast movement can cause issues?

The lack of natural support in the breast means that when we move, the breast moves. This then exerts a load/force on the supporting structures of the breasts and which in turn exerts a load on the upper body.

This has **implications** in terms of:



### 1 Performance

Excessive breast movement can influence how quickly an athlete breathes which can impact their stride length when running. In a rugby setting this could mean that an athlete would cover less ground and so take longer to get to where they want to on the pitch.

To prevent breast injuries, contact sports participants may modify or limit running or playing activities i.e., avoid tackling.



### 2 Participation

**1 in 4** women and half of girls perceive their breast to be a barrier to exercise due to pain, movement or embarrassment. This can lead to a reduction in engagement with sport.

Educating rugby athletes, coaches and support staff on potential issues may help to reduce these figures.

## Why should you pay attention to breast movement?

If the breast is not properly supported, its movement in rugby is likely to be considerable and to negatively affect performance. Some important facts about breasts in a sports context:

<p>If not properly supported, breasts can move up to <b>15 cm</b> and accelerate faster than an F1 car.</p>	<p><b>51%</b> of female GB athletes at the 2020 Tokyo Olympics reported experiencing breast pain.</p>
<p>Movement related breast pain is reported to affect up to <b>50%</b> of exercising women.</p>	<p>Many athletes experience skin friction injuries due to poor bra choice.</p>

Breast movement during sport can cause pain, damage, and reduce performance. In athletic populations breast and bra knowledge is low leading to poor bra choices. 'This is why education on these issues for athletes as well as coaches and others is so important.

**Remember! If we reduce breast movement we reduce breast pain, reduce the risk of damaging the breast tissue and improve performance.**

# 3. Breast Impact

## Important facts about breast impact

- There is likely to be a high prevalence of breast injury in rugby given that in a study of contact football players **58%** reported that they had experienced a breast injury.[1]
- The majority of players are unlikely to wear padding - one study reported only **17%** of Female Australian Football League (AFL), Rugby League, Union and 7s athletes used chest protection.
- **48%** of contact football players feel that breast impacts are likely to have a negative effect on performance.
- Injuries as a result of breast impact are likely to be under-reported and under-treated as coaches and other support staff unlikely to be aware of the problem
- Repeated breast impacts are likely to cause pain, bruising, and tissue damage which can lead to complications with breast screening.

It is important that we encourage rugby athletes, coaches and support staff to create a supportive environment where people feel comfortable to speak up.

## Types of breast impact

It is important to remember that we are not just talking about direct impacts on the breast.

Breast injuries can occur from impacts with:

- **The ball**
- **Players**
- **The ground**
- **Grappling**
- **Lying on the floor**

All of these can lead to the compressing of breast tissue and result in pain, tenderness, bruising, swelling, scar tissue and lumps (fat necrosis).

Scar tissue and lumps often mimic breast cancer, leading to difficulties in breast cancer screening. Therefore, it is recommended that an athlete with a history of breast trauma reports this when having a routine breast exam and mammogram.



# 4. Breast Health

## What can we do to encourage better breast health?

Here are four things that clubs and women and girls can do:

**1** Encourage rugby athletes and support staff to log breast injuries.



**2** Prioritise having a properly fitted sports bra.



**3** Apply breast padding.



**4** Be breast aware.

## What is breast padding?

The purpose of breast padding in rugby is to reduce impacts to the breast and therefore reduce the risk of breast injury. It is specific to female players and should be designed and constructed to minimise discomfort.

As breast padding is not usually designed to support the breast or to replace a sports bra, players are recommended to use a sports bra underneath any breast padding.

Regulations from World Rugby allows for padding that covers soft breast tissue, under the arm or integrated shoulder. It should also never restrict normal playing movement.

## ... Breast Health

### What to look for in breast padding?

If you are investing in breast padding make sure that it is:

- Smooth and with rounded edges, and no ridges on the inside or outside that could harm the wearer or other players.
- Comfortable and works alongside your sports bra.
- World Rugby Approved - look for the appropriate labels.



This will ensure that the World Rugby Body Padding Performance Specification is met and your device will do what it is supposed to do in terms of ergonomics, construction, sizing, design and impact attenuation.



For more information about breast padding and other forms of body padding visit [World Rugby](#)



# 5. Be Breast Aware

## What is being 'Breast Aware'?

Being 'Breast Aware' can help you look after your breasts and detect the signs of any health problems, such as breast cancer:

- Know how your breasts normally look and feel
- Regularly look and feel for changes
- Tell someone if you notice anything different
- Check your breasts, under your arms, under your breasts and around your collarbone.

Breast lumps don't always mean cancer. Changes in breast tissue are normal when they are growing or developing. Other causes of breast lumps could be non-cancerous tissue growth (fibroadenoma), a build-up of fluid, or non-cancerous cyst.

## Changes to look and feel for

**DO NOT TRY TO SELF-DIAGNOSE** the cause of breast lumps. Always speak to your GP if you are worried.

- A lump that feels different to usual
- A rash on the breast or nipple
- Discharge (liquid) from one or both of your nipples
- Skin texture changing - puckering or dimpling, a bit like orange peel
- A swelling in your armpit or around your collarbone
- A sudden change in size or shape
- Constant unusual pain in your breast or your armpit
- Your nipple suddenly becoming inverted (pulled in) or changing direction



If you are worried about anything to do with your breasts it is always a good idea to talk to someone.

## Things that WON'T give you breast cancer

- Injuring the breast
- Breast implants
- Wearing an underwired bra
- Using deodorant

Leading a healthy and balanced life can help prevent breast cancer as can:

- Maintain a healthy weight
- Keeping physically active
- Eating a balanced diet
- Limiting your alcohol intake



How should I check my breasts? Visit [NHS](#)



For credible and reliable resources about breast education visit [Treasure Your Chest.](#)



# 6. Research Study References

[1] **Brooke R. Brisbine, Julie R. Steele, Elissa Phillips & Deirdre E. McGhee (2020)** Breast injuries reported by female contact football players based on football code, player position and competition level, *Science and Medicine in Football*, 4:2, 148-155, DOI: 10.1080/24733938.2019.1682184

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[full/10.1080/24733938.2019.1682184#:~:text=Results%3A%20Fifty%2Deight%20percent%20of,injury%20affected%20their%20football%20performance.](https://www.tandfonline.com/doi/full/10.1080/24733938.2019.1682184#:~:text=Results%3A%20Fifty%2Deight%20percent%20of,injury%20affected%20their%20football%20performance.)

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