

# Guidance on Foot Care for Participants at the 2019 Berghaus Dragon's Back Race®

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## Guidance on Foot Care for Participants at the 2019 Berghaus Dragon's Back Race®

*A selection of expert advice from the race medics, blister specialists and the race organisers*

### Introduction

If you intend to treat foot problems as they arise at the Berghaus Dragon's Back Race® you have already chosen the wrong strategy! After all, feet are the most important part of your kit.

We know from the 2015 and 2017 editions of the Berghaus Dragon's Back Race® that 38% and 25% of participants respectively had medical treatment for blisters, and that blisters were the reason many participants failed to complete the full course or had to retire from the event altogether. On both occasions 45% of participants sought repeat treatment on at least one occasion, some many more times! This is likely a large underestimation of the true 'blister effect' as many people were offered advice on appropriate blister self care and therefore this was not recorded. Blisters account for a large burden of work for the race medical team. If you haven't already read the 2015 Berghaus Dragon's Back Race® Medical Report ([HERE](#)), then we strongly suggest you do so now, and pay particular attention to the Race Director's comments at the end. These comments will still stand true for the 2019 edition.

Much like you would see at an Accident and Emergency hospital there will be a triage system if you visit the medical tent for assistance AND we insist that competitors take primary responsibility for their own foot care. This will mean:

1. Patients will be assessed in a triage system prior to treatment with the most needy being treated first, regardless of the how long others may have already queued.
2. We will not assess anyone's feet unless they have been washed and are presented in a clean, mud free condition.
3. We will expect minor blisters to be treated by competitors themselves.
4. At triage assessment advice will be given as to whether a blister is 'minor' and how to treat it if required.
5. Competitors must have their own blister treatment kit (this is part of the mandatory kit list for the event) and the consumables from each competitor's personal blister treatment kit will be used to treat them with.

So, we are expecting you to help us during the event by looking after yourselves first and foremost, but you are not on your own. There will be approximately 400 participants and you'll be sharing tents with a number of others and we encourage a buddy system to look after each other, not only on the hill, but in the camp too. So, don't be afraid to get down and dirty, and help each other look after your feet!

We have unashamedly based this summary advice on three sources. These people are experts at foot care for multi-day events:

- John Vonhof's "[Fixing your Feet](#)" and buy it [Here](#)
- Anna Beetham's "[Oxfam Trailwalker](#)"
- Rebecca Rushton's "[Blister Prevention](#)"
- BMC article by Dr Suzy Stokes "[Friction Blisters: Prevention and Treatment](#)"

There are references (with links) at the end of this section, and we thoroughly recommend that you read John Vonhof's book and watch the videos (below). Then practice – a lot.

## Blister Prevention

Foot care is easily divided into several phases. We are sure you all know the 6Ps: '**Proper Preparation Prevents Piss Poor Performance**'. Well, you should be thinking of this too!

- **Proper Preparation** = foot care in the months before the race (you are responsible for this)
- **Prevents** = prevention of blisters before and during the race (you are responsible for this)
- **Piss Poor Performance** = treatment during and afterwards (we will help with this)

### Blister Prevention - Before the Race

#### Proper Preparation (months before the event)

- Get rid of calluses, keep nails short\*. Get rid of rough patches. Visit a chiropodist for proper advice and pedicure.
- Keep the skin soft and supple with massages and skin-care creams. Some people recommend creams with shea butter.
- Practice prevention. Learn preventative taping: you know your own problem areas. Try alternative socks, shoes, strategies such as foot lubricants, powder and blister plasters. Consider friction reduction of the shoe (Engo patches, double socks etc).
- We do not recommend vaseline, gels or similar products on your feet. Vaseline in particular is sticky, attracts grit and hardens in your socks.
- We do not recommend waterproof shoes: They will fill with water and keep your feet wet. You will be running for five days in potentially wet terrain! Shoes should drain rapidly to help dry your feet. If you wish to use waterproof 'footwear' then we recommend waterproof socks (such as [Gore Cycle Wear GoreTex Socks](#)) rather than shoes but it is important to remember that these can also fill with water and cause the same problem as waterproof shoes.

\* At all the Ourea Events expedition races a participant has had to withdraw because poorly maintained toe nails have caused blistering to adjacent toes **on the first day**. Don't be a statistic... nails should be neatly trimmed about 5 days before the event.

## Blister Prevention - During the Race

### Prevents (pre-race and during race)

- Use your practiced taping method. Use a skin adherent.
- Use lubricants with caution on your feet. Do only what you know has worked in your training. If lubricants are used, we recommend [\*PJur Active 2Skin\*](#).
- Use good moisture-wicking socks and shoes that you are familiar with.
- During the race change socks, clean and dry feet, reapply tapes, powder or gels as necessary. You should always do this **immediately after finishing** to give your feet the longest possible time to recover overnight.
- Stop and treat hot-spots immediately.
- At the end of each day pamper your feet: wash and dry them, massage them, keep them warm, keep your feet up whenever you can.
- Remember there is no single method to be recommended. What works for you is the correct method.

## Blister Assessment

### Piss-Poor Performance

This is what happens if you don't follow the other Ps! We insist that competitors take primary responsibility for their own footcare but our medics are available to offer advice or treatment as required. If you do develop a blister, the first questions to consider are: How bad is it? Can I treat it myself? Do I need medical advice or treatment?

*A and B © Berghaus Dragon's Back Race® Competitor. C © Jim Mann (not his feet though!)*

- **A:** This foot has a blood blister and two small (intact) blisters. Whilst these will make running uncomfortable, these are not 'bad' blisters and competitors would be expected to treat these themselves.
- **B:** This is certainly a painful blister but good quality self-care (cleaning, padding, taping) allowed this participant to continue. Don't worry about asking for treatment advice from the medics.
- **C:** These blisters show signs of infection and required hospital treatment (they were sufficiently painful that the participant needed crutches to walk). Infected blisters are dangerous, look out for signs of infection – these include:
  - worsening pain
  - feels hot in the area
  - swelling and redness around the blister,
  - pus coming from the wound (yellow/green discharge not the normal clear yellow fluid)
- **D:** Macerated feet (see picture below) are extremely sore and prone to infection. Macerated feet occur when the skin is saturated for long periods of time and this leads to the overhydrated skin becoming soft and easily damaged. This condition is a significant hazard at the Berghaus Dragon's Back Race® should the weather be wet and typically Welsh.

**Blistered and macerated feet are treatable but only by withdrawal from the event.** REMEMBER: Prevention is better than cure.

## **Blister Treatment**

DIY blister care is simple with a general aim of reducing pressure friction at the blister site.

**Blister Treatment when the skin remains intact AND the blister does NOT require lancing:**

This treatment protocol would be the same for a 'hot spot'.

1. Ensure your hands and feet are clean.
2. Apply a non-adhesive island dressing (NOT a 'Compeed' type dressings). Ensure that the blister is covered by the non-adhesive part of the dressing.
3. Tape to secure the dressing in place.
4. Monitor for signs of infection and reapply dressing if it becomes soaked with fluid from the blister.

**Blister Treatment when the skin remains intact AND the blister requires lancing:**

A blister only requires lancing once it has become swollen with fluid.

1. Ensure your hands and feet are clean.
2. Lance the blister using a sterile scalpel blade. Lance in multiple sites to aid fluid removal.
3. Gently massage the excess fluid under the blister out through the holes.
4. Apply antiseptic such as Betadine.
5. Apply a non-adhesive island dressing (NOT a 'Compeed' type dressing). Ensure that the blister is covered by the non-adhesive part of the dressing.
6. Tape to secure the dressing in place.
7. Monitor for signs of infection and reapply dressing once it has become soaked with fluid from the blister.

*Above: The video shows lancing around the edge of the blister. Recent (Jan-2016) recommendations suggest lancing down the length of the blister (but not to fully de-roof). This prevents fluid reaccumulating without loss of the skin as a primary layer for protection.*

**Blister Treatment when the skin is broken:**

When the 'roof' of skin over the blister site has partially torn.

1. Ensure your hands and feet are clean.
2. Apply antiseptic such as Betadine
3. Apply a non-adhesive island dressing (NOT a Compeed type dressing). Ensure that the blister is covered by the non-adhesive part of the dressing.
4. Tape to secure the dressing in place.

5. Monitor for signs of infection and reapply dressing once it has become soaked with fluid from the blister.

**Why do we do not recommend using Compeed or other 'sticky blister plasters' on blisters when the skin remains intact or whilst some skin remains on the blister site?** This is a multi-day event and these types of plasters tend to stick to the blistering skin surface (the 'roof' of the blister) and tear it away when the blisters are assessed and/or re-dressed causing further damage.

**Blister Treatment when the skin has been removed :**

This type of blister is known as 'de-roofed'.

1. Ensure your hands and feet are clean.
2. Apply antiseptic such as Betadine
3. Apply a hydrocolloid dressing (such as Compeed)
4. Tape to secure the dressing in place.
5. Monitor for signs of infection and reapply only once the dressing has naturally become soaked and peeled away (usually a few days).

**Blister Treatment Kit**



*Above: The recommended complete Blister Treatment kit weighs only 103g and contains sufficient supplies to see most participants through the 5 days at the Berghaus Dragon's Back Race® or equivalent*

A **Blister Treatment Kit** is mandatory equipment for the Berghaus Dragon's Back Race®. This **MUST** contain the following items that can be used by the competitor or the medical team when treating a runner's blister. A Blister Treatment Kit must include the following:

- Sterile Medical Scalpel Blade (size #11) x5
- Antiseptic Ointment 30ml / Antiseptic Wipes x5
- Sterile Island Dressings (7cm x 6cm) x5
- Sterile Cotton Swabs x10
- Hydrocolloid Dressings (such as Compeed) x4

Participants are welcome to source these supplies themselves or alternatively they can [purchase a pre-made kit directly from our shop](#) from £19.99.

The mandatory kit also includes:

- Kinesiology Tape (5cm x 5m) x1
- Small Scissors x1

These items are not included in our Blister Treatment Kit. We strongly recommend that kinesiology tape is cut to length before the event as this is time-consuming and frustrating when tired.

## **Sharps**

Scalpels are extremely sharp! Participants should take great care when using them not to damage themselves, other competitors or the tent. Scalpels can be carefully re-packed into their protective foil wrappers once used. We are able to safely dispose of medical waste including 'sharps'.

## **Final Word**

The medics are not just foot care attendants. If you have any other medical problems, please ask and they will be happy to help you out.

Good luck. Practice lots.