

## Testing for gene doping – Frequently Asked Questions

### 1. What is gene doping?

Gene doping is the genetic or cellular manipulation of the horse's DNA, either directly via gene editing techniques or by the addition of genetic material into the cell by gene transfer, in an attempt to enhance athletic performance or by aiding recovery following exercise.

It is already prohibited under the [Rules of Racing](#) and is widely recognised across thoroughbred racing jurisdictions as an emerging risk to the fairness of competition and equine welfare – impacting both the horse itself and having the potential to have a lasting impact on the future of the thoroughbred breed.

### 2. Why is the BHA testing for evidence of gene doping?

It's essential that British racing is always proactive in responding to new and evolving risks to the integrity of our sport and the welfare of our horses.

Internationally, racing jurisdictions are aware of the threat gene doping poses and are working together to expand our collective knowledge and analytical capabilities, including via the [Gene Doping Control Subcommittee](#) of the International Federation of Horseracing Authorities (IFHA).

To help combat this risk, the BHA, in partnership with the LGC laboratory in Fordham, has invested almost £2 million into ground-breaking research to improve our detection and monitoring techniques – establishing the testing methods needed to identify and deter the use of gene doping.

With these methods now established and validated, we are in a position to begin testing for evidence of gene doping with immediate effect.

### 3. When will the testing start?

Now that we have the necessary capabilities through the LGC laboratory we are incorporating the testing into the BHA's existing anti-doping programme with immediate effect.

The testing for gene doping will be conducted alongside our routine raceday and out of competition [sampling](#). These combine random and intelligence-led testing to ensure the Rules of Racing are being followed by everyone who competes on our shores, including internationally based runners.

Trainers shouldn't notice anything different in terms of the testing process; BHA officials will collect the sample as normal, and this will be analysed at LGC in Newmarket – one of the world's premier surveillance laboratories.

### 4. What happens in the event of a positive test?

The process will be exactly the same as when a Category A (Prohibited At All Times Method or Substance) is detected. The trainer and owner will be notified and the BHA will conduct an investigation. More information about this process is available on the [BHA website](#).

**5. Is there any evidence that gene doping is taking place in British racing?**

We are not aware of any evidence to suggest that gene doping is currently taking place in Britain or in other thoroughbred racing jurisdictions.

However, we know that through scientific advancements these capabilities now exist, with international examples of the use of genetic manipulation in other equestrian activities.

We therefore need to be alive to these risks and take preventative measures to deter the use of gene transfer and gene editing – expanding our knowledge and expertise to stay ahead of any new and evolving threats.

This is about being proactive, which is something we will continue to do both domestically and globally, through ongoing partnerships with scientific experts and international counterparts.

**6. Why is it necessary to start testing right now?**

Because we now have the tools and technological capability to do so accurately.

These processes have been developed over several years in partnership with the LGC laboratory in Fordham and the BHA Centre of Racehorse Studies.

The first step was establishing and refining the testing method itself; the second step was to ensure that LGC secured official accreditation to offer testing for gene doping, so that the testing could be incorporated into the BHA's Anti-Doping programme, which has now been achieved.

**7. What is the difference between gene doping and gene therapy?**

Gene doping is concerned with enhancing performance.

Gene therapy may, in certain circumstances, be considered acceptable under the Rules of Racing, for the treatment of a clinically diagnosed injury or disease, if the BHA is satisfied that horse welfare has not been compromised and the treatment is not considered to give the horse a competitive advantage or disadvantage in a race.

Any gene therapy for a horse intended to race must be reported to the BHA and fully documented in the horse's passport, or in any manner required by the BHA. Under the Rules, the BHA may, at its discretion allow or disallow racing by horses or their offspring after such therapy.