



## Statement by Animal Welfare Iceland / AWI

Dear friends of the Icelandic Horse, dear friends in favor of animal welfare!

In February 2022 a group of Icelandic horse and animals lovers decided to found a new Animal Welfare foundation. Founding members are: Birta Flókadóttir (chairman), Björn M. Sigurjónsson, Meike Witt, Ólafur Róbert Rafnsson og Rósa Líf Darradóttir.

Inside SDÍ we work in project based groups, led by experts in their field such as veterinarians, jurists, ethicists, medical doctors and other matter specialists.

Our first big project is the much criticised bloodmare business in Iceland.

As the bloodmare business has found a lot of attention abroad as well, we dediced to offer a quick FAQ about the matter, see below.

We are working on our website and hope to be able to provide more detailed information and international studies thera. In the meantime please don't hesitate to contact us if you want to know more about the bloodmare situation or have any other questions about our foundation.

### **If you want to join the foundation and support us as a member:**

Send us an email to [dyravelferd@dyravelferd.is](mailto:dyravelferd@dyravelferd.is) with your name and email address (+ kennitala for Icelanders).

Annual fee is 2.000 ISK except 1.000 ISK pr. person for couples, senior citizens and students. **First year free.**

With kind regards,

Animal Welfare Iceland (icelandic: Samtök um dýravelferð á Íslandi)



Find us on Facebook and Instagram as **@dyravelferd**

## **BLOODMARES IN ICELAND – A QUICK SUMMARY**

### **Q: What are „bloodmares“?**

A: In Iceland bloodmares are female horses (mares) that are kept in large herds in order to draw blood from them during the summer. Their blood contains the hormone PMSG (pregnant mare serum gonadotropin - see below). As the name suggests, in order for them to produce this hormone they must be pregnant. So a bloodmare will need to have a foal every year which just becomes a „by-product“. As of 2022, there are about 5,300 blood mares in Iceland (with the total population of horses in Iceland being approx. 60,000). The Icelandic company Isteka currently receives approximately 170 tons of blood each year from bloodmares and was recently granted a license to increase their production allowing them to process 600 tons of mares' blood. This means that in a couple of years there may be up to 20,000 bloodmares in Iceland and the possibility that every 3rd to 4th horse in Iceland could be a bloodmare or a foal/young filly associated with this blood business.

### **Q: What is PMSG?**

A: PMSG stands for pregnant mare serum gonadotropin. Sometimes it is also called eCG standing for equine chorionic gonadotropin. It is a hormone produced in the chorion of pregnant mares. Typically the hormone is used to induce ovulation in livestock prior to artificial insemination. Pregnant mares secrete the hormone from their endometrial cups between 40 and 130 days into their gestation. See more about PMSG and its use below.

### **Q: What happens to the foals that are born as „byproducts“?**

A: Most male foals will go to slaughter, some are as young as 6-8 weeks old. Most male foals will be slaughtered in autumn. Female foals will be either slaughtered or reared to be used for the blood business themselves. Some of the foals are sold on to be used as riding horses.

### **Q: How much blood is taken from the mares?**

A: In Iceland 5 liters are taken every week for up to 8 weeks during the summer.

### **Q: Does it effect the health and well being of the mares?**

A number of Icelandic and foreign veterinarians believe so. A typical Icelandic mare has a weight of around 350 – 370 kg. Usually a mare will have about 75-80 ml blood per kg bodyweight, thus giving a mare a total amount of approx. 26 – 28 l of blood. Note that a very fat horse will not have more blood than a leaner horse. So, if you take 5 liters per week, you are indeed draining about 18.5 to 20% of the total blood volume each time and for up to 8 weeks in a row.

## International recommendations on blood volumes & frequency

### Sources:

- <https://www.nc3rs.org.uk/blood-sampling-general-principles>

“As a general guide, up to **10% of the total blood volume (TBV)** can be taken on a single occasion from a normal, healthy animal on an adequate plane of nutrition with minimal adverse effects; this volume may be **repeated after three to four weeks.**”

- <https://www.mdpi.com/2076-2615/11/5/1466/htm>

**Table 1.** Recommended blood volume limits and recovery periods (reprinted with permission and modified from [78]).

Single Sampling *		Repeat Sampling	
% Circulating Blood Volume Removed in A Single Sampling	Approximate Recovery Period	% Circulating Blood Volume Removed in 24 h	Approximate Recovery Period
7.5%	1 week	7.5%	1 week
10%	2 weeks	10–15%	2 weeks
15% *	4 weeks	20%	4 weeks

\* For single sampling it is not recommended to remove >15% of the blood volume due to risk of hypovolemic shock.

- [https://ouv.vt.edu/content/dam/ouv\\_vt\\_edu/sops/large-animal/sop-equine-blood-collection.pdf](https://ouv.vt.edu/content/dam/ouv_vt_edu/sops/large-animal/sop-equine-blood-collection.pdf)

b. A maximum survival bleed not exceeding **10% of CBV (Circulating blood volume) is allowable once monthly.**

c. Bleedings performed **weekly should not exceed 7.5% of CBV**

- German guidelines for the collection of blood in the veterinary field  
[https://www.bvl.bund.de/SharedDocs/Fachmeldungen/05\\_tierarzneimittel/2011/leitlinien\\_blutprodukte.html?fbclid=IwAR2LdJvbH4zL--gTk-Jz5h12D5RxcS-F1KwsRk7mCuV\\_F-az00nwbmehxzk](https://www.bvl.bund.de/SharedDocs/Fachmeldungen/05_tierarzneimittel/2011/leitlinien_blutprodukte.html?fbclid=IwAR2LdJvbH4zL--gTk-Jz5h12D5RxcS-F1KwsRk7mCuV_F-az00nwbmehxzk)

Page 4: Mares may **not be pregnant or lactating.**

Page 10: The blood extraction from horses shall not exceed 15ml/kg body weight. Between the blood extractions should be a period of **at least 30 days.**

- An expert opinion by veterinarians Dr. Barla Barandun and Dr. Ewald Isenbügel recently [published on Visir](#) confirms that **5 litres are 15 – 20 % of the total blood volume of an Icelandic horse**, and that blood extractions of **more than 10 % should only be done once a month.**

As a matter of interest: Compared to humans, the amount of blood drawn from the mares is a much higher percentage than it is deemed safe for humans in blood donations.

Source:

Rósa Líf Darradóttir MD, Bloodmares – hvað segja vísindin?

[https://www.visir.is/g/20212196811d?fbclid=IwAR2TUxV0bSKx0u6cvK0O5GeHfcRD4XT3JoYmG4mEr4CD\\_PXLYZ2S5pFJtQs](https://www.visir.is/g/20212196811d?fbclid=IwAR2TUxV0bSKx0u6cvK0O5GeHfcRD4XT3JoYmG4mEr4CD_PXLYZ2S5pFJtQs) – Please contact us for the English version of this article.

**Prof.Dr. med.vet. Ewald Isenbügel, Barla Barandun Veterinarian-** Veterinärmedizinische und dem Tierschutz dienliche Informationen über die individuelle Gesamtblutmenge des Islandpferdes, die Menge des abgenommenen Blutes und die möglichen Folgen für trächtige Stuten (2021)

[https://www.feiffengur.com/documents/Open\\_Letter\\_Barandun\\_Isenb%C3%BCgel.pdf](https://www.feiffengur.com/documents/Open_Letter_Barandun_Isenb%C3%BCgel.pdf)

– please contact us for the version in German or Icelandic

**Ingunn Reynisdóttir, veterinarian** – Í þágu hestssins (2022) <https://kjarninn.is/skodun/i-thagu-hestsins/?fbclid=IwAR1eTHU4RCr6Fq6qmPgN5IfLO4BbQwaM1-938VK01dzfQ7qBngttJ4huntw>

## **A: What can be the symptoms of of excessive blood loss?**

When you suffer from excessive blood loss, you become anemic. The typical symptoms are: tachycardia, feeling cold, feeling hunger, thirst, lethargy, dizziness and dyspnea.

The symptoms are more pronounced when the blood loss occurs rapidly like it would be in the case of the bloodmares who lose up to 20% of their blood in between 4 and 10 minutes.

A report by two Icelandic veterinarians in 1982 describes that mares fell to the ground, lay still, seemed uncomfortable and would not move. (Eggert Gunnarsson, Þorsteinn Ólafsson, 1982). As most of the blood taking business is conducted „out of sight and behind closed doors“ it is very difficult to conclude if this behavior is very common or not but the sheer volume of blood loss gives reason for grave concern, especially for pregnant and nursing mares. A video published by the Animal Welfare Foundation (AWF) and Tierschutzbund Zürich (TSB) was filmed with hidden cameras. The video also showed brutal treatment of the mares during the bloodtaking in Iceland.

<https://www.youtube.com/watch?v=SkHP65O4RUg&t=3s>

Warning: The video shows graphic brutality against horses.

Isteka, the company who extracts the PMSG/eCG from the blood, has maintained for years that it has extensive research showing that the blood taking does not effect the mare's health. However, when challenged to publish this research, Isteka could not provide scientific data.

Source: Rósa Líf Darradóttir MD, Bloodmares – hvað segja vísindin?

[https://www.visir.is/g/20212196811d?fbclid=IwAR2TUxV0bSKx0u6cvK0O5GeHfcRD4XT3JoYmG4mEr4CD\\_PXLYZ2S5pFJtQs](https://www.visir.is/g/20212196811d?fbclid=IwAR2TUxV0bSKx0u6cvK0O5GeHfcRD4XT3JoYmG4mEr4CD_PXLYZ2S5pFJtQs) – Please contact us for the English version of this article.

## **Q: Are there others impacts on the horses' welfare beside the extensive blood loss?**

The picture below shows the difference between a regular needle used for administering medication into a horse's vein and the bloodletting needle which is much larger. The horse only has two jugular veins and repeated insertions into the jugular vein of horses with a

needle 5 mm in diameter can cause pain and irritation to the vascular wall and bruising may occur. This soreness may be exacerbated by the reuse of the needles and the needle becoming dulled. All this can lead to painful inflammation and in some cases the closing of the vein.



(Picture copyright Ingunn Reynisdóttir)

The video by AWF|TSB showed that needles were reused. In a modern country with high medical standards, this is an incomprehensible omission that is clearly contrary to animal welfare.

The psychological effect on mares has been, until now, under evaluated. Most mares are not used to being handled and are often beaten as they are herded into the small bloodletting stalls. Their heads are tied up in an uncomfortable position and back straps are fastened so that they are made

completely immobile. Some try to fight and often hurt themselves while others stop fighting and resign themselves in „learned helplessness”, which is a state of mind where a horse seems to give in but in fact suffers from frantic fear for its life as a result of the repeated traumatising. The stress of being separated from their foals adds to the mares’ mental suffering. The video published by AWF|TSB, filmed with hidden cameras, shows their desperation during the process. <https://www.youtube.com/watch?v=SkHP65O4RUg&t=3s>

Warning: The video shows graphic brutality against horses.

Source: Learned Helplessness – please read the article published by Icelandic veterinarian Ingunn Reynisdóttir <https://kjarninn.is/skodun/i-thagu-hestsins/?fbclid=IwAR1eTHU4RCr6Fq6qmPgN5IfLO4BbQwaM1-938VK01dzfQ7qBngttJ4huntw> - An English and German version can be obtained from us, please contact us!

Source: **Prof.Dr. med.vet. Ewald Isenbügel, Barla Barandun** Veterinarian- Veterinärmedizinische und dem Tierschutz dienliche Informationen über die individuelle Gesamtblutmenge des Islandpferdes, die Menge des abgenommenen Blutes und die möglichen Folgen für trächtige Stuten (2021) **please contact us for the version in German/English or Icelandic**

## Q: What is the blood used for?

The blood taken from Icelandic bloodmares is used by the Icelandic company Isteka to produce PMSG (pregnant mare serum gonadotropin) which is also called eCG (equine chorionic gonadotropin). Its prime use is in factory farming where it is used to induce and synchronise oestrus in farmed animals - mainly in pigs - so that they get pregnant soon after weaning and give birth all at the same time. PMSG is also used to stimulate superovulation resulting in the cruel practice of sows having more piglets they can nurture leading to an increase in piglet death in factory farming. This practice has been heavily criticised by

animal welfare organisations. The products Isteka is producing are not used for human medicine.

More about PMSG/eCG: <https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/equine-chorionic-gonadotropin>

Isteka's customers are mainly from Spain, France and Germany. It is good to know that Icelandic pig farms do not use PMSG/eCG. It has been harshly criticised by animal welfare groups that countries, such as those listed above, outsource the PMSG production to other countries because the abuse involved in the production would not be accepted in their home country for animal welfare reasons. Iceland is the only country in Europe which is involved with the production of PMSG, the only exemption being Thuringia, which is a state in Germany, where the authorities have granted approval to a PMSG production under the guise of animal experimentation. Animal welfare groups have already taken legal action against this arbitrary approval practice and these unnecessary "animal experiments". A blood farm in the Netherlands had to be closed down in 2015 due to widespread protests.

Neither Switzerland nor Germany permit the extraction of blood in large quantities from pregnant and/or lactating mares for commercial or research purposes, let alone at weekly intervals.

### **Q: Are there alternatives for PMSG/eCG?**

A: According to veterinary experts, induction and synchronisation of oestrus is also possible with zootechnical methods such as exercise, optimal nutrition and lighting, contact with sows in oestrus and boar contact. Such measures are, for instance, used in organic farming. Furthermore, there are numerous synthetic alternatives available to breeders for the induction and synchronisation of oestrus in farmed animals – 36 products in Germany alone – and their efficacy is very similar to PMSG according to different studies.

Source: <https://docplayer.org/80595704-Pregnant-mare-serum-gonadotropin-pmsg-produktion-zulassung-und-einsatz.html>

[https://www.wir-sind-tierarzt.de/2017/11/alternativen-zu-pmsg/?fbclid=IwAR1v0jKpxF1y9BwfzOUFKRk\\_iISodb2CRSEkx-6xwDebL5Pm2VXQbW2beTQ](https://www.wir-sind-tierarzt.de/2017/11/alternativen-zu-pmsg/?fbclid=IwAR1v0jKpxF1y9BwfzOUFKRk_iISodb2CRSEkx-6xwDebL5Pm2VXQbW2beTQ)

[https://www.srf.ch/news/schweiz/weniger-tierleid-schweizer-schweinezucht-verzichtet-definitiv-auf-stutenblut?fbclid=IwAR16aGIXwoy-XAIWVhk9AqJx-SD\\_fjmeEuQyhgwcoKiwfJ7HVIaZ9t9i7I8](https://www.srf.ch/news/schweiz/weniger-tierleid-schweizer-schweinezucht-verzichtet-definitiv-auf-stutenblut?fbclid=IwAR16aGIXwoy-XAIWVhk9AqJx-SD_fjmeEuQyhgwcoKiwfJ7HVIaZ9t9i7I8)

**A detailed list of studies comparing PMSG/eCG with synthetic alternatives can be obtained. Please send us an email.**

### **Q: Is the practise of blood farming widespread in Iceland?**

A: As of 2022 there are 119 farms who keep 5,400 mares for blood collection. The company Isteka, which produces PMSG/eCG, owns horses itself, although numbers of horses owned by Isteka varies from a couple of hundred to thousands. Research into World Fengur, the International Studbook of Origin for the Icelandic horse, showed that many blood mares and their foals do not seem to be correctly registered.

## Q: Are Icelanders in favor of blood farming?

A survey by Icelandic newspaper Fréttablaðið showed that 66% of Icelanders are opposed to the practise.

Source: <https://www.frettabladid.is/frettir/mikill-meirihluti-thjodarinnar-andvigur-blodmerahaldi/>

A bill to ban the practise is currently being discussed in Icelandic parliament. Many Icelanders hope that Svandís Svavarsdóttir, the Icelandic Minister for Agriculture, will ban the practice. Svandís Svavarsdóttir is a member of the Left - Green Party (VG). The bill is at the moment being discussed in the Industry commission (*Atvinnuveganefnd*) and a special work group has been established by the minister to examine the industry including the legal basis and economic impact of the activity.

Source: <https://www.stjornarradid.is/efst-a-baugi/frettir/stok-frett/2022/01/03/Starfshopur-um-blodtoku-hefur-storf/>

The following Icelandic Horse Associations have already urged the Icelandic government to ban the the blood mare business:

The Horse Trainer Association of Iceland (FT Félag Tamingamanna)

Source: <https://www.althingi.is/altext/erindi/152/152-589.pdf>

The Association of Riding Clubs in Iceland (Landssamband Hestamannafélaga)

Source: <https://www.althingi.is/altext/erindi/152/152-460.pdf>

FEIF – the International Federation of Icelandic Horse Associations and numerous of its national associated organisations, such as the German IPZV.

Source: <https://www.althingi.is/altext/erindi/152/152-478.pdf>

<https://www.ipzv.de/newsdetail-kurzmeldungen/blutfarmen-auf-island.html>

## Q: What can I do to support the Icelanders who want to ban the blood mare business?

A: Write to the following decision makers urging them to take a stand against the blood mare business in Iceland:

- **Svandís Svavarsdóttir**, Minister for agriculture: [svandis.svavarsdottir@mar.is](mailto:svandis.svavarsdottir@mar.is)
- **Stefán Vagn Stefánsson**, chairman of the Industry commission of the parliament: [stefan.vagn.stefansson@althingi.is](mailto:stefan.vagn.stefansson@althingi.is)
- **Sveinn Steinarsson**, chairman of the Horse Breeders Association of Iceland (Félag Hrossabænda): [sveinnst@fhb.is](mailto:sveinnst@fhb.is)
- **Horses of Iceland**, international marketing project: [horsesoficeland@gmail.com](mailto:horsesoficeland@gmail.com)

**Thank you so much for reading! Please don't hesitate to drop us a line, if you have any more questions or would like to support the foundation!**

Please contact via email [dyravelferd@dyravelferd.is](mailto:dyravelferd@dyravelferd.is)