Info for Vets - C-Stamp

The C-Stamp is an important part of the German Shepherd Schutzhund Club of Canada's commitment to the ongoing health of the German Shepherd Dog.



To participate, we require that you understand the following:

It is imperative that you positively verify the identity of the dog presented to you based on the documents presented and the microchip in the dog.

Dogs must be micro-chipped. A tattoo only is insufficient identification. If a dog is presented to you without a microchip, you will need to chip the dog and scan the chip to verify it before proceeding with the x-rays. One of the stickers with the chip number can be affixed to the pedigree document.

The Giessen Dysplasia Centre (DZG) WILL REJECT if the x-rays are not to their specifications. If the x-rays are rejected, you will need to re-x-ray the dog.

Criteria:

- Only German Shepherd Dogs are eligible.
- On the day the x-rays are taken, the dog must be 12 months of age or older.
- Only German Shepherd Dogs with registration papers/pedigree recognized by the GSSCC can participate. This includes CKC, AKC, German (SV), or any FCI recognized country, i.e. most European countries. If you are in doubt, consult our director via the phone number listed below.
- Dogs MUST be sedated during hip x-rays.
- All dogs x-rayed for this program must be microchipped. This identification MUST correspond to their registration papers.
- The evaluation forms as presented must be completed and signed by the veterinarian and the owner.
- X-rays must be uploaded to the VetXL portal. They must be in Dicom format.

https://www.myvetsxl.com/en/Logon/default.aspx

The images must be uploaded under "Foreign Breeding Club." Select "Dr. Bernd Tellhelm" from the list of experts.

The following information must be exposed on the identification plate of the x-ray:

- Complete registered name of the dog as it appears on the registration
- Registration Number
- Date of Birth
- Date x-ray was taken
- Name of current owner
- Name of veterinarian and address of clinic/hospital

An additional training webinar is available for a fee if you wish to pursue it. Please contact our director as listed below for more details.

Cathie Pierson (250) 465-8532 cathiepierson@gmail.com

The following letter from Dr. Tellhelm outlines a webinar and certification that is a mandatory requirement for the WUSV A stamp screening procedure but is optional for the GSSCC C stamp screening procedure.

The online portal process applies for both WUSV A stamp and GSSCC C stamp.

Dr. Bernd Tellhelm

Fachtierarzt für Chirurgie Diplomate European College Veterinary Diagnostic Imaging (Dipl. ECVDI) Schubertstraße 42 35392 Gießen Tel.: 0641/9203980

Fax: 0641/9203981

Information for WUSV Clubs

Requirements for veterinarians selected to make radiographs for WUSV HD-ED procedure

Dear colleagues,

Two steps are necessary to get the certification to take radiographs for GSD in the context of the WUSV A stamp screening procedure for HD, ED, OCD.

First step:

Successful participation in a webinar which will be online through the DZG webpage. This will familiarize you with the basics of HD-ED screening and the technical requirements. The most important criteria are positioning of the joints and quality (detail) of the x-rays.

Attendance in the webinar only makes sense for veterinarians who are using digital radiography already. We will accept digital radiographs in DICOM format only.

Good image quality / detail and correct positioning is essential for correct and fair scoring.

Second step:

To obtain your certificate, after the webinar you will have to send HD and ED x-rays of five GSD to the central scoring expert to approve the technical quality of your radiographs as well as the correct identification of the dogs on the x-rays.

It is mandatory that all images are submitted via the online portal www.myvetsxl.com/en/Logon/default.aspx.

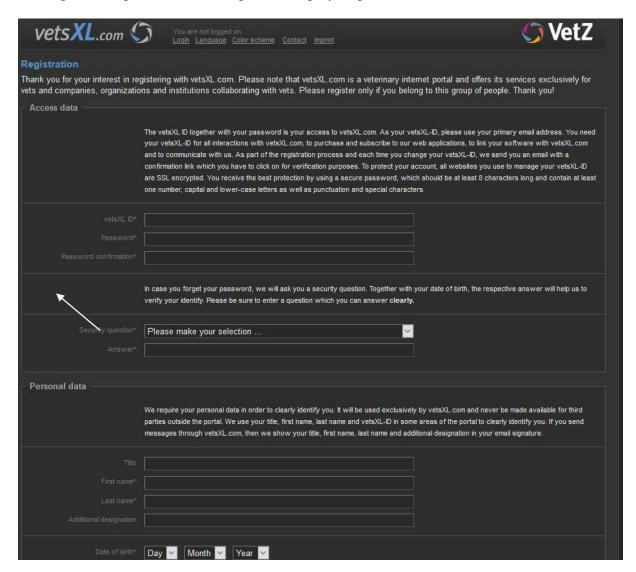
Therefore you will need to meet the technical requirements to use the portal.

We highly recommend to sign up in the portal under <u>vetsXL.com</u> and complete a test run before starting the certification procedure.

Before starting an upload procedure you will have to register and create a personalized account. Once registered you can sign in and upload images under your own account. You can use the following URL for your registration:

www.myvetsxl.com/en/UserRegistration/default.aspx

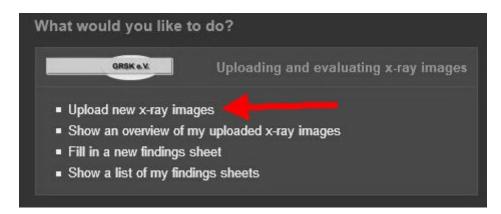
The registration process will be explained step by step.



Should you encounter any problems during the registration process please contact Mr. Mattes from the VetZ company:

myvetsxladmin@vetsxl.com or M.Mattes@vetz.vet or myself.

If you are registered the upload procedure is as follows:

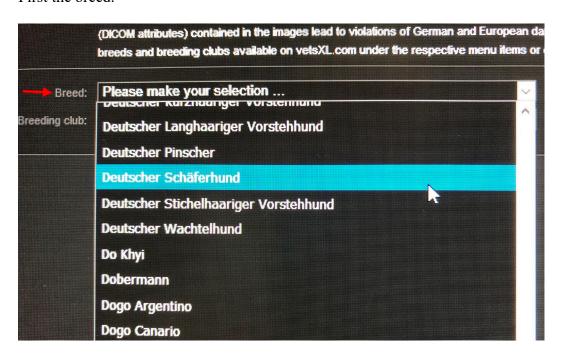


Use the marked button.

master data					
1	Proceed particularly careful when selecting the breeding club. Erroneously sent x-ray images may due to the owner and animal information (DICOM attributes) contained in the images lead to violations of German and European data protection regulations. In doubtful cases, check the				
	breeds and breeding clubs available on vetsXL.com under the respective menu items or contact the GRSK.				
Breed:	Please make your selection				
Breeding club;	Please make your selection				
-					
Submit					

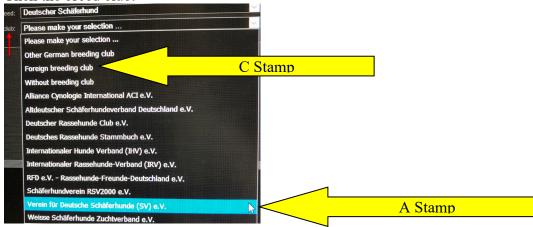
Then you have to select breed and breed club.

First the breed.



Select the blue marked breed Deutscher Schäferhund (German Shepherd Dog)

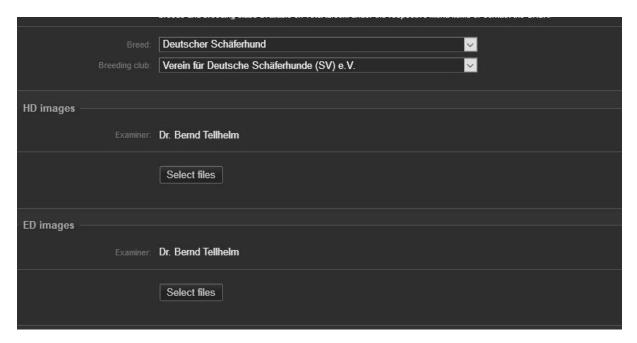
Then the breed club.



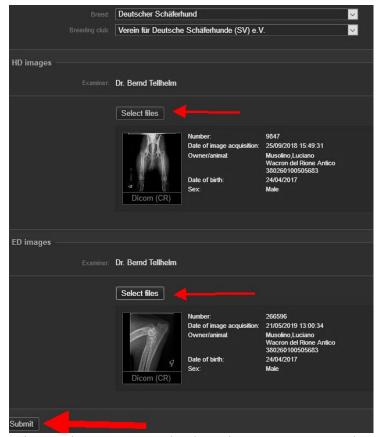
A Stamp - select Verein für Deutsche Schäferhunde (SV) e. V.

C Stamp – select Foreign breeding club

And then from the list of experts select Dr. Bernd Tellhelm



On the following screen you can upload your files.



It is very important to upload HD into HD images and ED into ED images.

Additional images from vertebral column should be uploaded under *HD images* and images from other joints under *ED images*.

The filmless online procedure will not only enable a better scoring of the x-rays but will also be an important contribution to the protection of environment.

Best regards

Dr. Bernd Tellhelm SV scrutineer

E-mail: Bernd.Tellhelm@vetmed.uni-giessen.de Bernd.Tellhelm@googlemail.com

How to take and read hip joint radiographs in a structured way

Mark Flückiger Prof. Dr.med.vet., Dipl. ECVDI Dysplasia Committee Zurich Winterthurerstrasse 270, CH 8057 Zurich. E-mail: HD@vetclinics.uzh.ch

Prevalence of canine hip dysplasia (CHD) can be reduced by controlling dogs for CHD radiographically and selecting those with normal hip joints for breeding. Best results will be achieved when phenotypic scoring is combined with progeny testing. The quality of a dog can be expressed as breeding value.

For official CHD examination a dog must be at least I year of age (Europe, UK, Australia) or 2 years of age (US) respectively. Hip radiographs are taken with the dog in complete muscle relaxation, making deep sedation or anaesthesia mandatory. The dog is placed in exact dorsal recumbence, the hind limbs are extended caudally and the stifles rotated internally so that the patellae are superimposed over the femora (Fig. I). The beam is centred over the caudal end of the pelvis so that the entire pelvis, the last lumbar vertebra and both stifles are included on the film (Fig. 2). A second projection of the pelvis with the stifles abducted is recommended but voluntary in most countries (Figure 3).

Hip joints are assessed for laxity and morphological changes of the acetabulum and proximal femur. Radiographic criteria for CHD scoring are a) degree of laxity, b) width of joint space, c) percentage of femoral head coverage, and signs of arthrosis/DJD both of the d) acetabulum and e) the femoral head and neck. Final scoring depends on the modality used in the country of examination.

As an example the Swiss scoring mode is presented (Table I), which can be transformed into a CHD grading according to FCI (Fédération Cynologique Internationale), (Table 2). The following 6 parameters are evaluated and scored separately for each hip joint (Figure 3):

- I. Norberg angle on the radiograph with the hind limbs extended
- 2. Position of femoral head centre (FHC) relative to dorsal acetabular edge (DAE), (degree of subluxation)
- 3. Shape of craniolateral acetabular edge
- 4. Shape and thickness of the subchondral bone of the cranial acetabular part
- 5. Shape of femoral head and femoral neck respectively
- 6. Osteophytes on the caudolateral edge of femoral neck (Morganline)

Each joint is graded separately. The joint with the higher score defines the degree of CHD for the dog. Total score is dominated by 3 parameters (parameter I to 3 in table I): Norberg angle (NA), degree of subluxation, and remodelling of the cranial acetabular edge respectively.

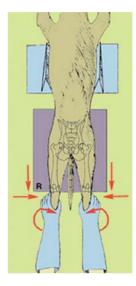


Figure 1: Schematic drawing showing how to position a dog correctly for radiographic examination for CHD (from:www.fondazionesaluteanimale.it/CENTRALE/index.html



Figure 2: Hip joint projection with hind limbs extended and slightly pronated. The x-ray beam is centered over the caudal edge of the pelvis. The entire pelvis and both stifles are depicted. Note marker (D) indicating right side of the dog.

Figure 3: Hip joint projection with stifles abducted and the tarsi elevated approximately 25 cm off the table. The the x-ray beam is centred directly over the hip joints.



Table 1. Radiographic criteria for CHD grading (The Swiss scoring mode)

Norberg Angle (JS= Joint Space)	Relation FHC/ DAE*, Width of Joint Space (JS)	Craniolateral Acetabular Edge (CAE)	Cranial Subchondral Acetabular Bone	Femoral Head (H), Femoral Neck (N)	Morgan-Line	Score
>/= 105° JS congruent	FHC medial to DAE (> 2 mm), JS narrow	parallel to femoral head	fine, even	H: round, smooth N: well demarcated	not visible	0
>/= 105°, but JS widened slightly, or < 105°, but JS narrow	FHC medial to DAE (1-2 mm), JS minimally divergent	horizontal on lateral 1/4	even	H: round N: poorly demarcated (cylindrical)	edged shoulder on view with stifles abducted care: smooth bump not scored.	I
>/= 100°	FHC super- imposed on DAE, JS slightly divergent	slightly flattened, or mild exostosis	sligthly thickened laterally, slightly reduced medially	H: slightly flattened N: mild exostosis	fine linear spur (up to I mm wide)	2
>/= 90°	FHC lateral to DAE (1-5 mm), JS moderately divergent	moderately flattened, mild exostosis, two part surface	moderately thickened laterally, moderately reduced medially	H: moderately flattened N: mild exostosis	well defined spur (up to 3 mm wide)	3
>/= 80°	FHC lateral to DAE (6-10 mm), JS markedly divergent	markedly flattened, moderate exostosis	markedly thickened laterally, may not be present medially.	H: moderately flattened N: moderate exostosis	broad irregular spur (> 3 mm wide)	4
< 80°	FHC lateral to DAE (>10 mm), or Luxation	DAE absent, acetabulum markedly deformed	blending with lateral pelvic rim or absent	H: severly deformed N: massive exostosis	spur incorporated in or superimposed by general exostosis	5

^{*} FHC= Femoral Head Centre; DAE = Dorsal Acetabular Edge

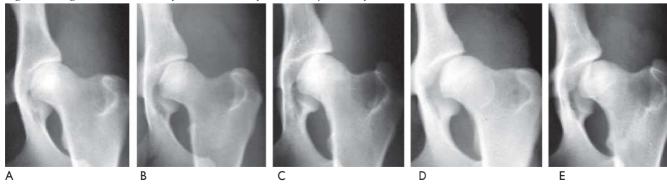
Table 2. Grading key

Total Score of the worse Hip Joint	Degree of CHD (according to FCI)		
0 - 2	Α	Normal, no evidence of CHD	
3 - 6	В	Borderline	
7 -12	С	Mild CHD	
13 -18	D	Moderate CHD	
> 18	Е	Severe CHD	

Score may be subdivided further and degree of CHD given as AI (score 0), A2 (score I-2), BI (3-4), B2 (5-6), CI (7-9) etc. if desired.

Caution: Total score reflects degree of CHD only approximately. Degree of CHD may be worse than indicated by score, particularly in young dogs with obvious hip joint laxity but no signs of arthrosis/arthritis (yet)! NA is the most valuable parameter as it can be measured objectively, has a wide scale of values and a high correlation and regression with the final scoring.

 $Figure 4: FCI grades A \ to \ E. \ (Taken from \ the \ website of the \ FSAhttp://www.fondaziones aluteanimale.it/CENTRALE/index.html)$



Radiographic Procedure and Scoring of Elbow Dysplasia (ED) in the Dog

(Requirements for the IEWG standardized screening procedure, updated version 2011)

Mark Flückiger, Assoc. Prof., Dr.med.vet., Dip. ECVDI Dysplasia Committee, University of Zurich, Switzerland

Radiographic technique

- 1. Minimal age for official scoring "sound" is 12 months. Some breed clubs have issued specific requirements. Earlier scoring "dysplastic" is possible in dogs with obvious primary lesions. **Dogs showing an elbow lameness should get radiographed at any age.**
- 2. Both elbows are radiographed.
- 3. Rare Earth screens with a speed of 200 or less are recommended in film-screen systems.
- 4. The elbow is placed directly on the cassette, no grid is needed.
- 5. The beam is collimated to improve image quality (does not apply in digital systems).
- 6. For the mediolateral projection the elbow is flexed (Fig. 1, 45- 60° opening angle between humerus and radius), resulting in concentric superimposition of the humeral condyles. The medial coronoid process (MCP) itself is best identified on a mediolateral view with the limb extended and 15° supinated (Fig. 2, very importand in GSD). Good results are achieved with a 50-60 kV-setting.
- 7. A craniocaudal 15° pronated view is strongly recommended to identify OC lesions (Fig.3, not so importand in GSD because OCD is rare).
- 8. Radiographs are permanently marked with a) the date of the examination, b) the identity of the dog, c) the identity of the owner of the dog and d) the clinic making the study.

Positioning elbow joint, radiographs

Figure 1 Mediolateral view, 45 ° flexed



Figure 2 Mediolateral view, 120 $^{\circ}$ extended



Figure 3 Cranio-15°lateral-caudomedial

