

#### Canine and Feline RADIOGRAPH SET REQUIREMENT: Information for Residents *Reviewed and revised June 2021*

"Radiograph Sets" are one of several items that must be included in a completed EVDC <u>Credentials Application Package</u>. Approval of a Canine and a Feline Radiograph Set is required before a Credentials Application can be approved. Radiograph Sets can be submitted for <u>Pre-Approval</u> review. The form used by the Credentials Committee to review radiograph sets is available for your inspection. It is strongly advised that residents and their supervisor use the Credential Committee radiograph review form to complete a self-assessment of the radiograph set before submitting them to the Credential Committee for review. The comments included on the review form describe common reasons for non-approval of radiograph set submissions.

Radiographs of good quality are critically important for the diagnosis and treatment of oral diseases. An entry-level diplomate should know what perfect dental radiographs look like and how to produce them, including proper mounting, labeling, projection geometry, contrast and clarity. A cadaver specimen is strongly advised for both dog and cat submissions as it is considered unethical to use live animals just for this purpose due to unnecessary and lengthy anaesthesia. (Submission of brachycephalic breeds for radiograph submission is strongly discouraged due to the overlap and crowding of teeth. Feline submissions with tooth resorption (TR) are also discouraged due to the inability to review the entire tooth/root.)

## **Timing of Submission**: This section applies only to residents with a registration date of January 1<sup>st</sup> 2022 or later.

Understanding what an acceptable full-mouth radiograph set looks like and how to obtain it are fundamental items for a veterinary dental specialist. Therefore, canine and feline full-mouth radiograph sets are required to be **submitted in the first year** of a training program. If an initial submission is not approved, additional sets are to be submitted so that both sets have been **approved by the end of the second year**. If a resident fails to have met either the submission in the first year or approval within two years requirements, the status of her/his training program will be reviewed and the program may be suspended until the radiograph set requirement is met (i.e. no logging of cases, specialty hours, etc. will be permitted). Radiograph sets can be submitted year-round.

#### Two Radiograph Sets are Required:

Full-mouth dental series of a canine with full permanent dentition. Full mouth dental series of a feline with full permanent dentition.

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A **CANINE** radiograph set must include the following standard images:

- > Occlusal view of the maxillary incisors
- > Occlusal and Lateral view of the maxillary canines
- > Lateral view of the maxillary premolars and molars
- Occlusal view of the mandibular incisors
- Occlusal and Lateral view of the mandibular canines
- > Lateral view of the mandibular premolars and molars

A **FELINE** radiograph set must include the following standard images: Note: If extra-oral imaging is used, it must be identified in legend as "extra-oral lateral," or "extra-oral oblique."

- > Occlusal view of the maxillary incisors
- > Lateral and Occlusal view of the maxillary canines
- > Lateral view of the maxillary premolars and molars
- > Occlusal view of the mandibular incisors
- > Lateral and Occlusal view of the mandibular canines
- > Lateral view of the mandibular premolars and molars
- 1. A complete permanent dentition is required. (*The following teeth may be absent in a submitted radiographic set that may include 1 but not more than 1 of the following exceptions:* 1 maxillary or mandibular incisor tooth (canine and feline); 1 maxillary premolar other than the maxillary 4<sup>th</sup> premolar tooth (canine and feline); 1 maxillary 1<sup>st</sup> molar (feline); 1 mandibular 3<sup>rd</sup> molar (canine).
- 2. A full mouth radiographic set should be taken from one specimen (cadaver/patient) in one session. It is under no circumstances allowed to use images from different cadavers/patients in a full mouth radiographic set.
- 3. The maximum number of views that may be submitted as part of a digital image radiograph set is Feline: 12; Canine: 24. For a canine set, EVDC recommends using a small head cadaver to reduce the overall number of images needed. Additional radiographs showing alternative views must be justified in the figure legends. Submissions that contain additional views with no justification will be returned unreviewed.
- 4. **Mounting**: The radiographs are to be mounted using labial mounting. Images of teeth from the patient's left side are to be mounted on the right side of the radiograph and vice versa. Crowns of the maxillary teeth are to point down, crowns of the mandibular teeth are to point up. Occlusal views are to be centered, with teeth pointing up or down as above, and with the first incisors immediately adjacent to the midline of the radiograph. Last molars are to be on the periphery of the radiograph.





Identification of RIGHT or (R) and LEFT or (L) must be present on each image template page. A *LEGEND* must be present below each radiograph. This legend is to identify the tooth and view taken that is expected to be reviewed in that image. (Example: A lateral radiograph of 104 should have the following legend:104 Lateral)

Extraoral imaging must be identified as such on the legend. Specifically label oblique views used to separate superimposed structures. Missing and supernumerary teeth must be identified on the legend. The label is to include: Date, approximate age (if known), breed (if known) **Sets that are submitted without proper labeling or mounting will be returned to** 

the resident unreviewed.

# It is not allowed to flip any image to make them look like an image of a tooth other than the one it is.

- 5. **Positioning** (e.g. root length), exposure, contrast and clarity are to be optimal. All roots must be seen in correct angulation. Each root is to be isolated on at least one radiograph. At least 2mm space beyond apices is to be visible (on a series of views when necessary). Radiographic images must reflect the length of the tooth with avoidance of foreshortening or elongation. Horizontal overlap may be present on a particular image as long as a separate image shows the entirety of that root (i.e. distal root of the maxillary 4<sup>th</sup> premolar may be overlapped with the maxillary 1<sup>st</sup> molar to allow proper isolation of the mesiobuccal and mesiopalatal roots of the 4<sup>th</sup> premolar tooth.) If additional radiograph(s) are included to isolate some roots, the legend must state the purpose of the additional radiograph(s). Specifically label oblique views used to separate superimposed structures. /Note: Radiographs that are correctly positioned but of poor exposure, contrast, clarity or that have other technical defects will not be approved.
- 6. To avoid that a clinical patient is held under unnecessary prolonged anesthesia just for the purpose of the radiograph set, it is strongly advised to use a cadaver (whole-head, with jaws intact and all soft tissue present). Label the radiographs: Date, cadaver, (or live patient if used), species, age and breed (if unknown- provide estimate). Please note that, if a radiograph set is not approved, individual views that were not adequate can be re-taken and swapped into the set for submission as a new radiograph set; EVDC recommends keeping the original cadaver in a freezer in case it is needed for additional views. Please note both dates on any resubmission for consistency.

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## Full mouth

#### radiograph sets

*must be made on digital systems.* The use of indirect digital imaging system with dental phosphorus plates are strongly recommended, however the use of phosphorus plates size 5 or greater is not permitted.

- 7. Examples of approved radiograph sets are available on the web site under Quick Links on the Resident Resources page.
- 8. Radiograph sets must not contain labels or other information that could identify the resident or hospital from which they were submitted.
- 9. The Radiograph Set must be approved by the Supervisor, and the Supervisor Form, which is available under Resident forms - Radiograph Submission form must be signed and submitted to the Secretary. It is again strongly recommended that the supervisor review the set with the resident using the credential committee radiograph review form prior to submission.
- 10. The resident should keep copies of the original Dicom images in case the Credential Committee request clarification of the submitted radiographs.

## Submitting a Radiograph Set

The quality of the image must be sufficient to ensure that zooming in to view parts of the image during review will not result in unacceptable loss of image quality. High quality files (.tiff, .jpg files or images embedded in a Word.doc file) are recommended – see details, below. Transfer for submission as an Acrobat.pdf format file is permitted; be sure to use the High Quality Print setting in Adobe Acrobat to avoid pixilation of the images. Maximum file size permitted as a DMS submission is 50 MB.

DMS submissions must consist of images produced by:

> A digital dental radiographic system, (direct or indirect digital).

## ROENTGEN, William RadSet Dog.

Submissions are to be made via DMS – log into DMS, click the <u>Begin New Document</u> for <u>Submissiont</u> link on the right side of the <u>Welcome</u> screen, click <u>Radiograph Set</u>, click <u>Canine</u> or <u>Feline</u> and then upload the file by clicking <u>Attach File</u> on the top command line. Remember to include the completed Radiograph Set Submission Form as a file in the document.

Once the files are uploaded (you will see the file names in the document screen below the wide blue line), be sure to click the <u>Submit this Document</u> box in the yellow window on the right of the document screen and then click <u>Save Changes</u> in the top command line before exiting the document.

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## EVDC Process Following Submission

- 1. All radiograph sets will be evaluated with personal information of the trainee and supervisor redacted. Each radiograph set is assigned a code number by the Secretary and will be identified to the Credentials Committee members only by this number.
- 2. Comments and recommendations are forwarded by the review team members to the Chair of the Committee. If the majority of reviewers recommend approval, the radiograph set is approved. If there is no majority of opinion, the Chair reviews the radiograph set and the reviewers' comments, and casts a deciding vote. To view a copy of the EVDC Radiograph Set Evaluation Form, click <u>Cred Comm</u> <u>Radiograph Set Review Form</u> in the Radiograph section of the <u>Information for</u> <u>Registered Residents</u> web page.
- 3. The Credentials Committee may, at its discretion, request clarification if there are specific issues that would otherwise prevent approval of a radiograph set. In this case, a final decision will be withheld until a response to the '**Action Required'** DMS email notification is received from the resident.
- 4. For radiograph sets that are Not Approved, the Committee prepares a list of major reasons for non-approval.
- 5. The resident is informed of the results of the review by the Secretary.
- 6. The EVDC will, whenever possible, report the results of the review within 8 weeks of receipt of the radiograph set.

If a radiograph set is Not Approved, the specific views that were inadequate can be retaken and substituted into the original set. Note: The retaken images must be from the same cadaver as the original set. The revised set can then be resubmitted and will be reviewed by the same review group.

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## **Rebuttal Option**

Following receipt of a non-approval decision, the resident may submit a rebuttal, which is to include reasons why the resident considers each of the major concerns listed by the Credentials Committee to be inappropriate. A **maximum of 30 days** is permitted for receipt by the Secretary of a Rebuttal of a non-approval case report or radiograph set decision.

A **rebuttal** is not considered an appeal by EVDC and is sent to the members of the review team who originally reviewed the item. The decision on the rebuttal will be made as for any other item submitted to the Credentials Committee.

If the rebuttal does not result in approval of the item, the resident has the right to request that the original item and the rebuttal are considered as an Appeal of an Adverse Decision, which will be handled according to stated EVDC appeals procedures, (EVDC Bylaws Section 10).

#### Appeal

At any point in the process following receipt of an adverse decision on any item reviewed by the Credentials Committee, the resident may elect to submit a formal Appeal to EVDC. **The appeal must be received within 90 days of notification of the adverse decision**. The EVDC Appeal Policy is available in the <u>Appeals</u> section of the <u>Information for Registered Residents</u> web page. The appeal 90 day deadline does not start if a rebuttal is submitted

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