

PATIENT FLUOROSCOPY EXPOSURE REPORTING

PROCEDURE: ORS SOP-4

REVISION #: 0

EFFECTIVE DATE: 12/13/2019

LAST REVIEWED: 05/28/2020

1. Purpose

- 1.1. This procedure establishes the fluoroscopy exposure monitoring and reporting requirements for all UConn Health radiological imaging services.
- 1.2. This procedure outlines the process for reporting patient fluoroscopy exposures to the Office of Radiation Safety (ORS). It also defines when peak skin and/or fetal dose estimations are required. It also defines when patient follow-up is required based on peak skin and/or fetal dose estimations.

2. Applicability

- 2.1. This procedure applies to all fluoroscopy procedures performed at UConn Health and affiliated services.

3. References

- 3.1. NCRP Report 168
- 3.2. Joint Commission PC.02.01.01, EP 30
- 3.3. Stecker et al., Guidelines for Patient Radiation Dose Management
- 3.4. Centers for Disease Control and Prevention, Cutaneous Radiation Injury

4. Precautions

- 4.1. None

5. Procedure

- 5.1. The performing physician or designee shall complete and submit Attachment I, "Prolonged Fluoroscopy Procedures/Pregnant Patient Notification Form" to the office of radiation safety whenever:
 - 5.1.1. Fluoroscopy on time exceeds 60 minutes or,
 - 5.1.2. Cumulative Air Kerma Area Product (P_{KA}) exceeds 500 Gy·cm² (for 100 cm² field) or,
 - 5.1.3. Cumulative Air Kerma at the Reference Point ($K_{a,r}$) exceeds 3 Gy or,
 - 5.1.4. The patient is pregnant. This should be done on the day of the procedure.
- 5.2. ORS shall review the "Prolonged Fluoroscopy Procedures/Pregnant Patient Notification Form" to determine if a peak skin or fetal dose estimation is required.
- 5.3. If required, ORS will estimate peak skin dose (PSD) and/or fetal dose, determine if follow-up is required, provide that information to the

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Interventionalist and update the patient's medical record within five business days. Reporting must be done immediately if the fetus is in the field of view.

5.4. Patient follow-up guidelines include:

5.4.1. Estimated PSD > 3 Gy – follow-up at 2 weeks and 8 weeks.

5.4.2. Estimated PSD > 5 Gy – follow-up at 2 weeks, 8 weeks, and 6 months.

5.4.3. Estimated PSD > 10 Gy – follow-up at 2 weeks, 4 weeks, 6 months, and 12 months.

5.5. All estimated fetal dose calculations shall include a recommendation to track additional abdominal and/or pelvic radiation exposures for the duration of the pregnancy.

5.6. ORS will report the following metrics to the Radiation Safety Committee on a quarterly basis:

5.6.1. Number of procedures requiring PSD and/or fetal dose estimation.

5.6.2. Number of patients requiring follow-up.

Kevin Higgins
Radiation Safety Officer

Date

Dr. David Karimeddini
Radiation Safety Committee Chair

Date