

X-Ray Area Procedures

Volunteer Job Description

If No Dentist:

1. Once films have been processed, mark card then send patient with a chaperone who will escort the patient to the waiting area for Station #3 – Restorative and/or SDF Treatment

Lead Dentist(s):

1. Review the X-Ray images after capture.
2. Highlight on Patient Card in Patient Examination section, the quadrant that is of the **“Highest”** priority based on X-Ray findings
3. Sign the Patient Card **before** the patient moves to the next area

Trained X-Ray Volunteers:

1. Review patient card to make sure parent/guardian has given consent for x-rays.
2. Look at Station #1, Patient Examination section of the Patient Card. The screening dentist will have marked if x-rays are requested and what films should be taken. 2BWs, 4 BWs, or specific PA's.
3. Patient will be holding a rectangle plastic container with the phosphorous plates.
4. Place lead vest on the patient.
5. Take digital radiographs – see complete directions on page 9
6. Place phosphorous plates back into the cup.
7. Send patient with chaperone to imaging area.
8. Use disinfectant wipes on the NOMAD and vest – DO NOT remove the battery from the NOMAD during this procedure.
9. Change out gloves.

Training Information

Important: Every X-Ray Volunteer MUST Be Aware of The NOMAD Guidelines Before Operating any NOMAD

If you are unfamiliar on how to operate the NOMAD, please reference the NOMAD guide.

- Read Operating Procedures (Pages 10-13)
- Read NOMAD Alarms (Pages 18-19)
- Read the Troubleshooting (Pages 20-21)
- Read Safety Precautions (Pages 3-5)
- View NOMAD Training Video

After the TeamSmile orientation, someone from TeamSmile starts the training video.

After the video, the Radiation Safety Officer will review all the following information with you:

- Read TeamSmile’s Radiation Protection Program
- Review Posted Guidelines for NOMAD

Check with Program Director for State Guidelines

The following items might be required:

- **Dosimeters**

In some states dosimeters are mandated to monitor radiation. Operators **MUST** wear one during X-Ray capture procedures. Operators must fill out the dosimeter binder with their information in case there is an exposure. The dosimeter must correspond to the appropriate NOMAD.

- **Operator Vests**

In some states operator vests are also state mandated. Operators **MUST** wear one during X-Ray capture procedures.

Taking X-Ray Images

1. Seat the patient in the director chair
2. Place a lead apron over the patient’s front body
3. View the Patient’s Card to see what films need to be taken.
4. Take the plate from the plastic container, which the patient is holding, place it inside the patient’s mouth
5. Position the plate parallel to the roots of the teeth
6. Have the patient close lightly
7. Standing in front of the patient, turn the patients head then position the NOMAD as close to the cheek without touching it. The shield must be parallel to the patient/film.
8. Follow the X-Ray Capture Procedures to capture the image

X-Ray Capturing Procedure

- Turn on the NOMAD using the Power Button
 - The unit should play double tone and the screen is on
 - When ready to capture an image, pull the trigger once then release it immediately
 - The unit will display (ENABLING X-RAY), then will display (READY)
 - Aim the device away from you and towards the patient then pull the trigger again, holding the trigger down slowly for one true second (say out loud “One thousand one”)
MAKE SURE NO ONE IS IN CONE BEAM EXPOSURE AREA.
 - The Green LED on the unit will turn Yellow
 - You will hear a tone for the duration of the exposure
9. Repeat steps 4-8 to process for each film that needs to be taken.

10. Place phosphorous plates in the plastic container
11. Take off the vest, change gloves and clean with disinfectant wipe
12. Hand the patient with the cup off to a chaperone.

If the NOMAD is dropped, program director needs to return it to Aribex for service.

Student Volunteers:

Process phosphorous plates

- Step 1: Pull up patient's chart on computer, utilizing the search for patient by chart number in Dentrix, then click on "tooth" icon to open Sopro imaging
- Step 2: Record current time on patient card to the right of "Station #2"
- Step 3: Place finger cots on index and thumb of both hands or gloves.
- Step 3: Open the phosphorous plate cover, take off the finger cots/gloves on one hand, pull out the plate and process it.
- Step 4: Repeat process until all images are processed.
- Step 5: Check mark what films were processed on patient card (2BW, 4BW, or PA's)
- Step 6: When all films are processed, print images taken that day, fold paper and place in patients lanyard. These images will go home with the patient.
- **LEAVE PHOSPHOROUS PLATES IN THE WELL OF THE PSPIX. The person assigned to Table 3 will routinely walk around the tables and retrieve the plates.**
- Step 7: Dentist will view x-rays, if no dentist present, the patient will be escorted by a chaperone to the waiting area for Station #3 – Restorative and/or SDF Treatment, and a films will be reviewed chair side.

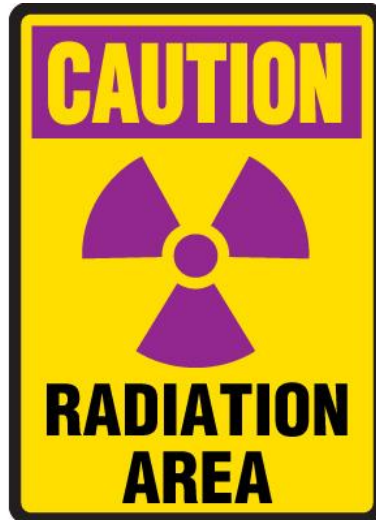
General Volunteers:

- Receivers will receive the patient from the Patient Exam Area and place in waiting chairs. When a director chair is empty, they will take the patient to Table 3 to pick up phosphorus plates and then place in director chair.
- Chaperones will escort the patient from Table 2 to Table 3.
- Once the dentist has reviewed the x-rays, a chaperone will escort the patient to the waiting area for Station #3 – Restorative and/or SDF Treatment.

X-Ray Flow

1. Patient will approach Table 3, where a trained volunteer will examine the patients mouth size and assign the patient the number of plates equal to the number of requested films. They will put the plates into a plastic container and hand back to the patient.
2. The patient will wait with a chaperone for an x-ray chair to become available. Once a chair is available, the trained volunteer will place a lead vest on the patient.
3. The trained volunteer will place the phosphorous plates in the patients mouth and engage the image – until all requested films are taken.
4. The phosphorous plates will then be placed back into the plastic container and the chaperone will escort the patient to one of the eight imagining stations.
5. The plates will be processed and printed.
6. A dentist will review the image on the computer and highlight the quadrant they feel would best benefit the patient.
7. The patient will then be escorted by a chaperone to the waiting area for Station #3 – Restorative and/or SDF Treatment..
8. The volunteer from the prep table will be responsible for retrieving the plates and inserting them back into the cover.

NOMAD Operating Guidelines



Important: The NOMAD device is VERY fragile

- Do not drop it. If dropped, please report to the Program Director. There may be undetectable damage that can cause a radiation leak.
- Don't operate if the backscatter shield is broken. If there is a crack in the shield, report to Program Director.
- Don't operate if the Collimator Cone is broken. If there is a crack in the cone beam, report to Program Director.
- Backscatter shield must be in the correct position (at the outer end of the collimator cone and close to the patient) on the hand-held imaging device during an exposure.
- When holding the device, place your hands behind the shield and remain directly behind the device's shield.
- Keep a 6-foot radius between the hand-held imaging device and any individual other than the operator and patient when you make radiographic exposures.
- Do not attempt exposure if anyone other than the patient is in the direct beam.
- Seat the patient with a wall behind him/her. Hold the NOMAD parallel to the patient. Have the patient turn their head sideways, and aim at the patient towards the wall.
- Operators and assistants must remain within a 6- foot radius
- Operators and Assistants must wear 0.5mm Lead Equivalent Aprons if mandated by State Code and a dosimeter if mandated by State Code. TeamSmile Program Director will advise you of the state code.
- Operators must wear appropriate PPE, Full Lead Apron in Ohio..
- Place the NOMAD imaging device back in its hard case when unattended.
- Keep units on designated tables and out of reach of patients.
- Procedures to limit the use of the hand-held device to intraoral purposes.

X-Ray Area Tear-Down

Keep One X-Ray Station Open Until ALL Treatment Has Been Completed

X-Ray Crate #1

NOMADs:

1. Turn the NOMAD power off
2. Clean NOMAD with disinfectant wipes
3. Place NOMAD, batteries and charger in crate – DO NOT use disinfectant wipe on NOMAD WITHOUT THE BATTERY ATTACHED
4. Place NOMAD binder in crate

From Table 3:

1. Count phosphorous plates and make sure the number we have corresponds to the number on the plastic container
2. If plates are missing, let TeamSmile Program Director know immediately
3. Put plates, covers and bite wings into Plastic Bin then place in Crate 1

Sterilization Crate 1

Vests:

1. Disinfectant wipe before storing
2. Roll or Hang
3. Place inside the plastic vest bin
4. Take to sterilization area

X-Ray Crate 2

Laptop and PSPIX

1. Shut down computer completely
2. Disconnect the power cables and gently fold them then Velcro
3. Place the PSPIX in the corresponding numbered plastic bin
4. Place the cords in the white box
5. Place the corresponding number computer on top
6. Unplug printer
7. Unplug router and switches

Additional Items

Return other inventory items back to areas of storage per the inventory checklist, page 2 of this manual.

Additional Information:

- **Hand Sanitizer:** Push down on the pump then turn it to lock it in place and avoid spillage during transport.
- **Dosimeters:** Gather and give to Program Director with Dosimeter Binder.
- **Gloves:** Combine boxes of same size, if possible, then return to PPE.

Important

Always wear gloves when handling disinfectant wipes. Gloves can be found in the PPE Area.