

Radiographers Positioning Guide for Suspected NAI Skeletal Survey Imaging

- Be prepared – paperwork, foam pads, markers, lead, toys and the X-ray room should be warm
- Try to stay calm and relaxed, this will help keep the child, carer and other staff calm.
- It is important to be methodical. Discuss the order of the imaging and the roles of each Radiographer before you begin.

Children should be completely undressed at the beginning of the examination. Trunk images should be done first. Distressed children can then be cuddled for comfort during extremities. Upper extremities can be carried out having child sat on a holder's knee next to the table or with holder and baby sat on the table using the big foam pad. Care should be taken to keep the holders fingers out of the light beam and anatomical markers should always be used.



AP CXR should include clavicles and lower costal margin. A 15 degree pad can be placed between the child and the cassette to prevent lordosis. Arms should be held out to side and slightly raised, held at the elbow whilst keeping head still. Second person holds lower half still. Large sand bags maybe used to immobilise legs (sand displaced).



Oblique CXR should cover down to lower costal margin. A 45 degree pad can used to support the child's body in an oblique position. Arms held above the elbow out to the side. Lower half held by wrapping legs in a towel and using lead.





Abdomen/pelvis should cover from diaphragm to upper femora, nappy must be removed. The baby should be supine on the table with one person holding upper body. Second person should hold the babies' legs, above the knee keeping the baby still and straight.



Lateral Spine - Use the 90 degree angle of two 45 degree pads at the back and another pad at babies' front. One person should hold pads securely. Second person should hold arms at the elbow, extending them out and away from the body while using other hand to hold babies head. The holder can also squat down to look at the child's face to offer comfort and distraction. This image should include cervical spine to coccyx.



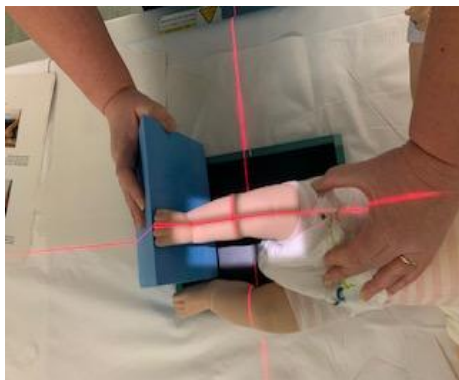
Humerus- Baby should be supine on the table. One person holds arm out stretched with palm facing up with one hand on upper chest or chin and other hand above the wrist. The image should include both joints. Second person holds lower half, keeping baby straight and still. Collimate to include both joints.



Radius and Ulna- Baby should be supine on the table. One person holds arm out stretched with palm facing up. One hand placed above the elbow and the other holding babies' hand. The image should include both joints. Second person holds lower half, keeping baby straight and still. Collimate to include both joints.



Femur- Baby should be supine on the table. One person should hold the upper body, keeping baby straight and still. Second person should hold the leg below the knee with the other hand above the hip. Collimate to include both joints.



Tibia and Fibula- Baby should be supine on the table. One person should hold the top half keeping baby straight and still. Second person should hold above the knee and use a foam pad to hold foot in the vertical position. This allows the ankle to be demonstrated without the holder's fingers. Collimate to include both joints.



Lateral knee- Use a 45 degree pad to support baby on their side. One person should support the upper body and hold leg above the knee. The second holder should keep the baby still and hold below the knee. It may be necessary to hold the other leg out of the way.



Lateral Ankle- Use a 45 degree pad to support baby on their side. One person sits with their head level with child and rotates child towards them giving cuddles and eye contact. Second person holds knee parallel to cassette and places foam pad at foot to achieve ankle position. It may be necessary to hold the other leg out of the way.



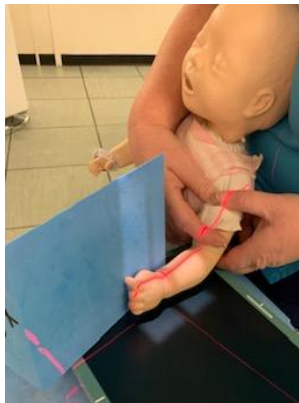
Feet - baby should be sitting upright on the large pad. Holder sits behind child to give support/cuddle holding leg at the knee. The second person should be there to support as necessary. The foot should be placed flat on the cassette.



Lateral Elbow – Baby can be sat on holder's knee next to the table or the holder may sit on the table with child leaning against them. The shoulder, elbow and wrist should all be in line parallel with the cassette. Holding the wrist in a lateral position and holding above the elbow.



Hands - Baby can be sitting on the holder's knee or the holder may sit on the table with child leaning against them. Arm should be immobilised in correct position holding at the elbow and the paddle or a foam pad can be used to keep the hand still. The wrist must be included on this image.



Lateral Wrists – Baby can be sitting on holder's knee or the holder may sit on the table with baby leaning against them. Arm should be immobilised in the lateral position using foam pads and held at the elbow.