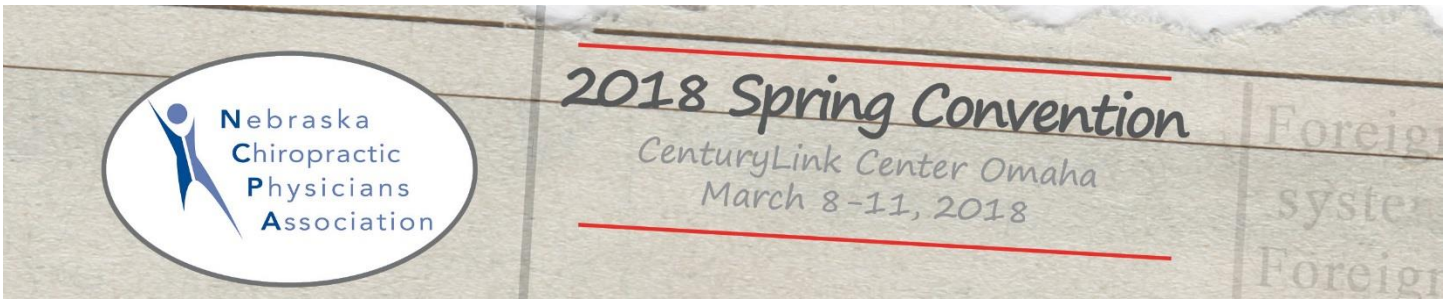

Speaker Information and Schedule for the CA Limited Radiography Session

Date: Friday, March 8, 2018 from 8am-5pm

Course Title: X-ray Review Course for Chiropractic Assistants

CE Hours Provided: 8 General hours

Speaker: Ben Stiles, DC, DACBR

Dr. Ben Stiles is a board certified chiropractic radiologist and has been teaching x-ray positioning and physics since 1998. He obtained is Doctorate of Chiropractic degree (1998) and his Diplomat of the American Board of Chiropractic Radiology certification (2001) from Cleveland Chiropractic College – Kansas City. From 2001-2017, he owned a successful chiropractic practice in Blue Springs/Independence Missouri, while also operating his radiology consulting practice teaching both doctors and chiropractic assistants nationwide. Currently, he is a full-time radiologist and owns his own consulting practice while continuing to teach seminars part-time. Ben Stiles, DC, DACBR lives in Lee's Summit, Missouri.

Course Summary: This is an interactive course that attendees will be able to learn and practice (if equipment is on-site) how to take a good quality x-ray while minimizing patient exposure and eliminating any exposure to themselves and those in the surrounding areas. The proper technique for x-ray production, review of basic skeletal anatomy, and an understanding of what makes a good x-ray film will be taught in this 8-hour course. Quizzes and reviews will not only keep the attendees engaged they will also challenge the attendees as if they were sitting for certification testing.

Course Objectives:

At the end of this program, the attendee will be able to:

1. Empress on the attendee that radiation safety is one of the most important things they control when in the x-ray room. Review cardinal rules of safety.
2. Teach the attendee about the different safety equipment in the x-ray room that is both inherent and added.
3. Teach the attendee about the anatomy of the x-ray equipment so they know the function of each piece of equipment as well as the name.
4. Teach the attendee about x-ray production, kVp, mA, mAs, focal-film distance, tube tilts, collimation, film sizing, grid cabinets/bucky, and compensation filters
5. Teach the attendee how to interact with the patient to relieve stress they may have while getting an x-ray while at the same time demonstrating a sense of confidence in radiation safety.
6. Teach the attendee how to properly measure for each spinal and extremity region to be x-rayed.

7. Teach the attendee the basic procedures for x-raying the entire spine. The course will cover the 'standard' views as recognized in *Essentials of Musculoskeletal Radiology, Yochum & Rowe.*
8. Teach the attendee how to determine if an x-ray film is of good quality so that they can discuss with their doctor if an x-ray needs to be retaken.
9. Each attendee will be able to use the equipment to see how it operates and functions. (if equipment is available on-site)
10. Each attendee will be able to participate in the entire process of patient positioning (measuring the patient, proper preparation/gowning of the patient, technique set-up for the kVp, mA and mAs, use of compensation filters, breathing instructions, patient positioning, x-ray equipment positioning using the correct focal-film distance, tube tilts and collimation as well as proper gonad shield usage). (if equipment is available on-site)
11. Discuss radiobiology with the attendee and emphasize the importance of using the cardinal rules of safety for themselves and those in the surrounding environment.
12. Review important anatomical landmarks and practice palpation of known anatomical landmarks to help with central ray placement.

Course Outline:

1. 8 am – 8:50 am
    a. Introductions
    b. Quiz
        i. x-ray equipment
        ii. x-ray terminology
        iii. x-ray production
        iv. anatomy
        v. patient positioning instructions
        vi. x-ray positioning specifics
    c. Quiz answers and review

2. 9 am – 9:50 am
    a. Review x-ray equipment
    b. X-ray production
    c. X-ray interaction with matter

3. 10 am – 10:50 am
    a. Palpation of anatomical landmarks
    b. X-ray patient positioning
    c. Cervical spine views
        i. AP open-mouth
        ii. Vertex
        iii. AP lower cervical
        iv. neutral
    d. Thoracic spine views
        i. AP
        ii. lateral

4. 11 am – 11:50 am
    a. X-ray technique
        i. kVp
        ii. mA
        iii. mAs
        iv. contrast
        v. markers
        vi. artifacts

5. 12 pm – 12:50 pm
    a. Lunch

6. 1 pm – 1:50 pm
    a. X-ray positioning
    b. Lumbar spine views
        i. AP
        ii. lateral
    c. Chest views
        i. PA
        ii. lateral
    d. Ribs views
        i. frontal
        ii. oblique

7. 2 pm – 2:50 pm
    a. Quiz over morning information
    b. Quiz answers and review
    c. X-ray safety
        i. Barriers
        ii. Dosimetry
        iii. Radiobiology

8. 3 pm – 3:50 pm
    a. X-ray positioning
    b. Cervical views
        i. Oblique
        ii. Flexion
        iii. Extension
        iv. Lateral flexion
    c. Swimmer's view
    d. Lumbar views
        i. Oblique
        ii. Flexion
        iii. Extension
        iv. Lateral flexion

9. 4 pm – 4:50 pm
    a. Quiz physics, terminology, anatomy and x-ray positioning
    b. Quiz answer and review