

## Head

### SKULL

X-rays of the skull are always taken with the patient lying down.

1. Skull PA, page 34.  
(Do not use for infants or children – use HEAD 2)  
NEVER USE this position when there is a possibility that the facial bones may be fractured or when the patient is unconscious.
2. Skull AP, page 35.
3. Skull (occiput) semiaxial (Towne's projection), page 36.
4. Skull lateral, page 37.

### SINUSES, FACE, AND NOSE

These examinations are unreliable under the age of 7 years

#### Patient sitting

5. Sinuses and face semiaxial, or nose PA, page 38.
6. Sinuses and face PA, page 39.
7. Sinuses, face, or nose lateral, page 40.

#### Patient lying down, unable to sit

Sinuses face, or nose AP – use Skull AP (HEAD 2, page 35)

Sinuses, face, or nose lateral – use Skull lateral (HEAD 4, page 37)

### MANDIBLE

#### Patient sitting

8. Mandible PA, page 41.
9. Mandible oblique lateral, page 42.

#### Patient lying down, unable to sit

10. Mandible AP, page 43.
11. Mandible oblique lateral, page 44.

# HEAD 1

## SKULL PA Prone – vertical beam angled 20° as shown BASIC

Never use when there is a possibility that the facial bones may be fractured or when the patient is unconscious. Use HEAD 3 instead.

### Cassette speed

Cassette with screen-film combination, nominal speed 200/400 in the cassette holder

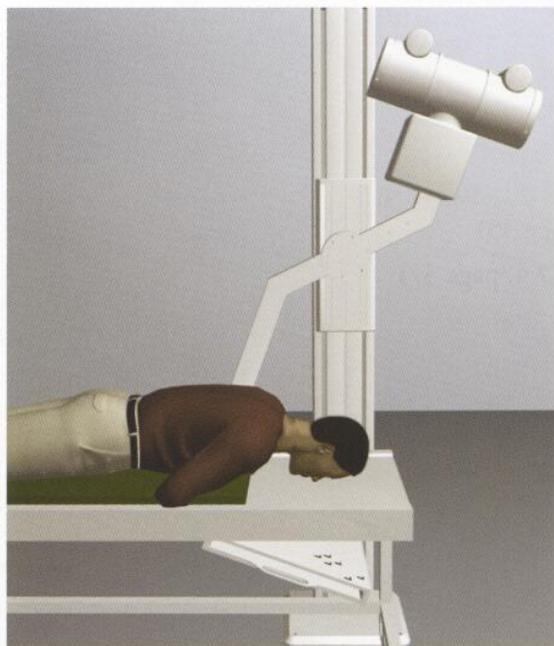
### Cassette size

24×30 cm (10×12 inches)

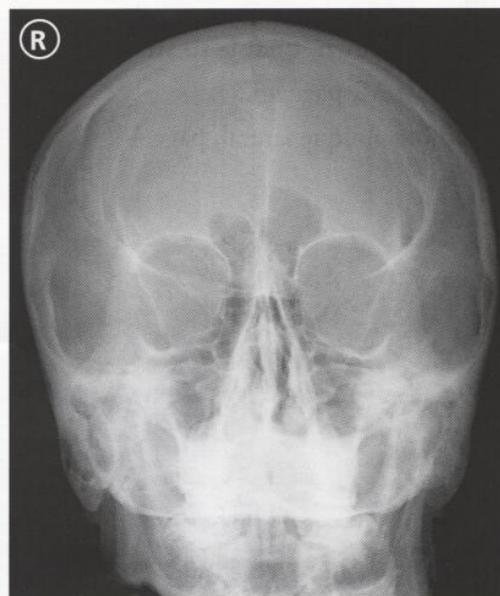
Use a **R**ight or **L**eft marker

Exposure values	mAs	
	"blue" system	"green" system
70 kV	200	400
Average	100	50
Range	63–125	32–63

1. Bring in the patient, put the cassette in the cassette holder. Collimate to the format.
2. Remove dentures, earclips, hairgrips, or anything from the hair. Mattress for the body. Place hands under the chest. Place the forehead and the nose on the stretcher-table.
3. Center and collimate further, if possible.
4. Expose.



Vertical ear-eye line



**SKULL AP** Supine – vertical beam angled 20° as shown **ADDITIONAL**

Use when the patient cannot be X-rayed in a prone position.

**Cassette speed**

Cassette with screen-film combination,  
nominal speed 200/400 in the cassette holder

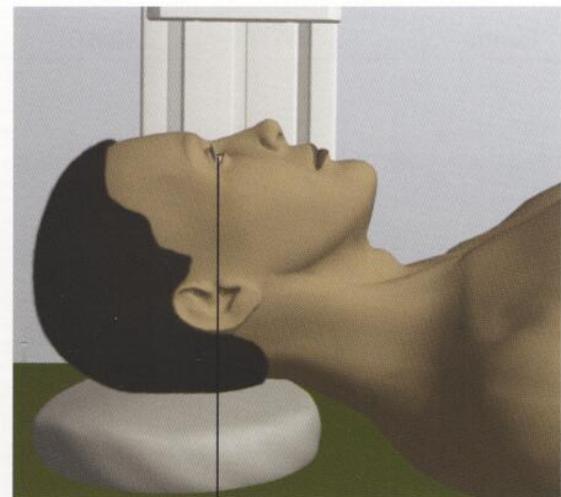
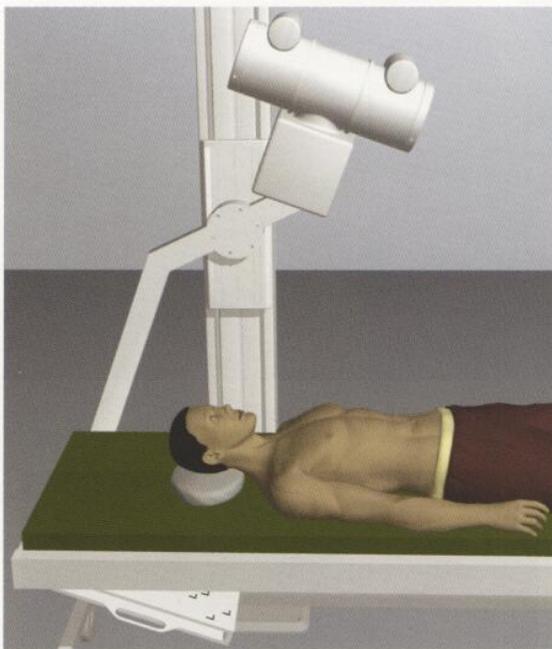
**Cassette size**

24×30 cm (10×12 inches)

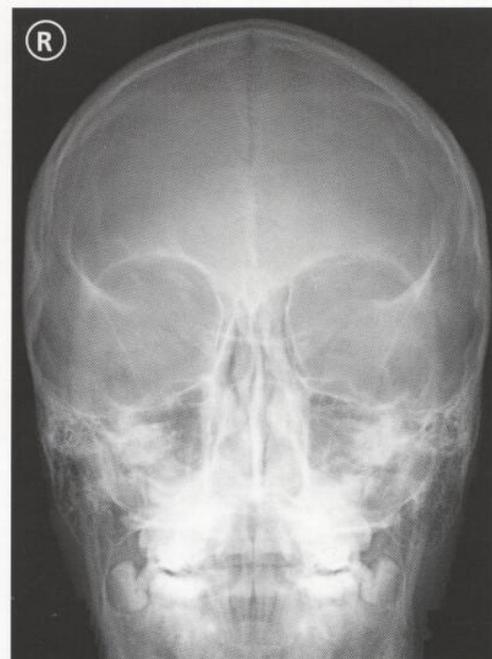
Use a **R**ight or **L**eft marker

Exposure values	mAs	
	"blue" system	"green" system
70 kV	200	400
Average	100	50
Range	63–125	32–63

1. Bring in the patient, put the cassette in the cassette holder. Collimate to the format.
2. Remove dentures, earclips, hairgrips, or anything from the hair.
3. Mattress. The patient's head should lie flat raised on a thin radiolucent (e.g. foam rubber) pad. Do not use a pillow.
4. Center to the root of the nose between the eyes. Collimate further, if possible.
5. Expose.



Vertical ear-eye line



## SKULL (OCCIPUT) SEMIAXIAL (TOWNE'S PROJECTION) **Supine – vertical beam angled 30° as shown** ADDITIONAL

### Cassette speed

Cassette with screen-film combination, nominal speed 200/400 in the cassette holder

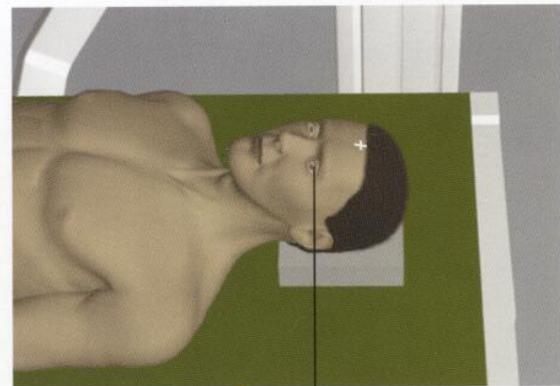
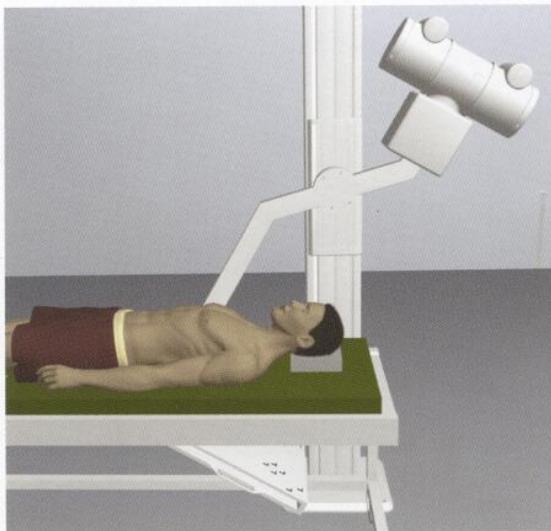
### Cassette size

24×30 cm (10×12 inches)

Use a **R** or **L** marker

Exposure values	mAs	
	"blue" system 200	"green" system 400
Average	80	40
Range	63–100	32–50

1. Bring in the patient, put the cassette in the cassette holder. Collimate to the format.
2. Remove dentures, earclips, hairgrips, or anything from the hair.
3. Mattress. The patient's head should lie flat raised on a thin radiolucent (e.g. foam rubber) pad. Do not use a regular pillow.
4. Center to the top of the head 7–8 cm from the root of the nose.
5. Collimate further, if possible.
6. Expose.



Vertical ear-eye line



**SKULL LATERAL**    **Supine – horizontal beam**    **BASIC****Cassette speed**

Cassette with screen-film combination,  
nominal speed 200/400 in the cassette holder

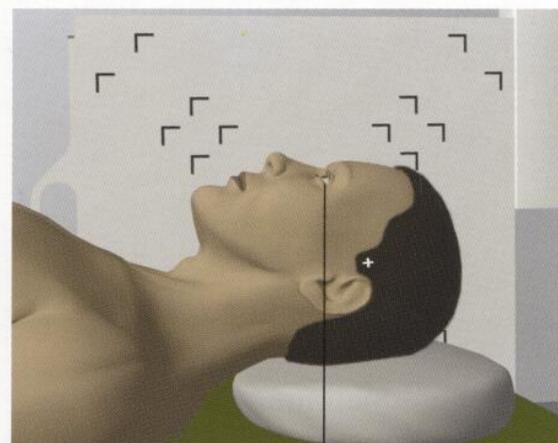
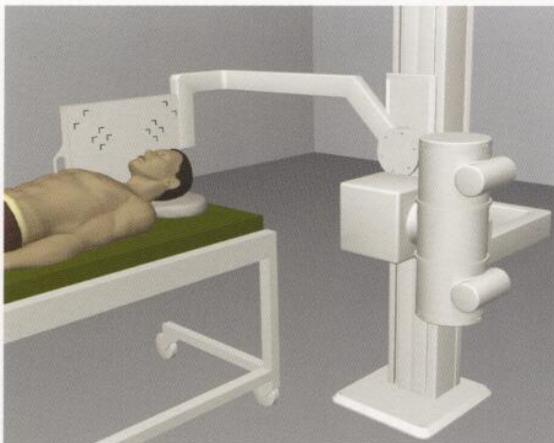
**Cassette size**

24×30 cm (10×12 inches)

Use a **R**ight or **L**eft marker to denote which side  
of the head that is close to the cassette

Exposure values	mAs	
	"blue" system 200	"green" system 400
70 kV	32	16
Average	25–40	12.5–20
Range		

1. Bring in the patient, put the cassette in the cassette holder. Collimate to the format.
2. Remove dentures, earclips, hairgrips, or anything from the hair.
3. Mattress. The patient's head should lie flat raised on a thin radiolucent (e.g. foam rubber) pad. Do not use a regular pillow.
4. The line from the outer corner of the eye to the ear opening shall be at right angle to the examination table.
5. Center as shown.  
Collimate further, if possible.
6. Expose.



Vertical ear-eye line



Front and back of skull must be visible

## SINUSES and FACE SEMIAXIAL or NOSE PA Sitting erect BASIC

If the patient is unable to sit, use the supine position (HEAD 3).

Use this view when only one view of the sinuses is requested.

Under the age of 7 years x-ray of the sinuses is unreliable for infection.

### Cassette speed

Cassette with screen-film combination,  
nominal speed 200/400 in the cassette holder

### Cassette size

18×24 cm (8×10 inches) for sinus

24×30 cm (10×12 inches) for face

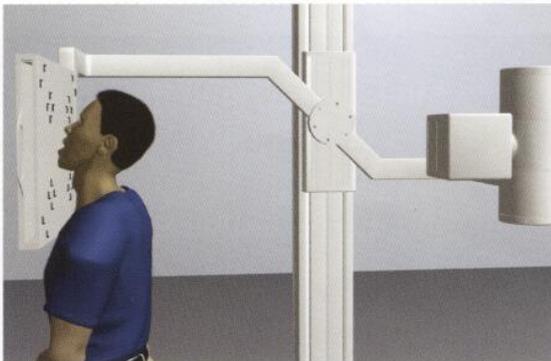
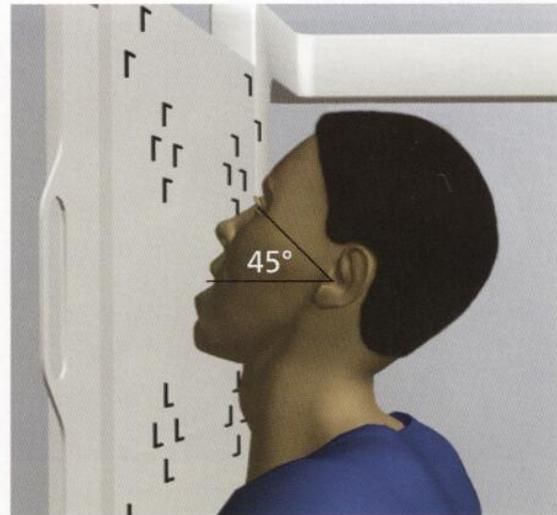
Use a **R**ight or **L**eft marker

Exposure values	mAs	
	"blue" system 200	"green" system 400/450
80 kV	200	400/450
Average	63	25
Range	50–80	20–32

1. Bring in the patient, put the cassette in the cassette holder. Collimate to the format.
2. Remove dentures, hairgrips, or anything from the hair.
3. Position the patient. Tell the patient to open the mouth as widely as possible and place the chin against the cassette holder. Tilt the patient's head back 45°.
4. Center as shown.  
Collimate further, if possible.
5. Expose.

45°-line – ear opening to lateral corner of the eye

Horizontal line – ear opening to mouth



**SINUSES and FACE PA** Sitting erect BASIC (face) ADDITIONAL (sinuses)

If ONLY ONE VIEW of the sinuses is requested by the doctor, use HEAD 5

**Cassette speed**Cassette with screen-film combination,  
nominal speed 200/400 in the cassette holder**Cassette size**

18×24 cm (8×10 inches) for sinus

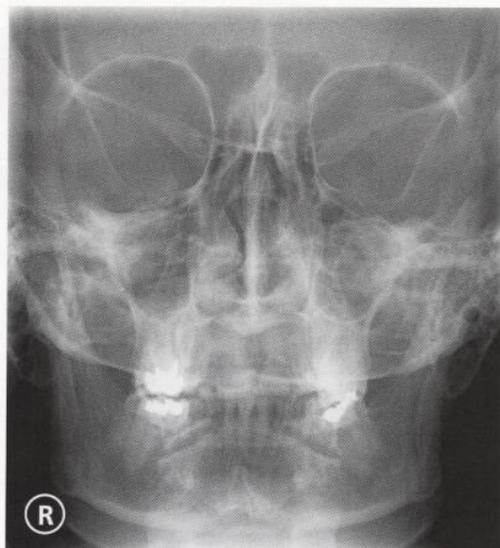
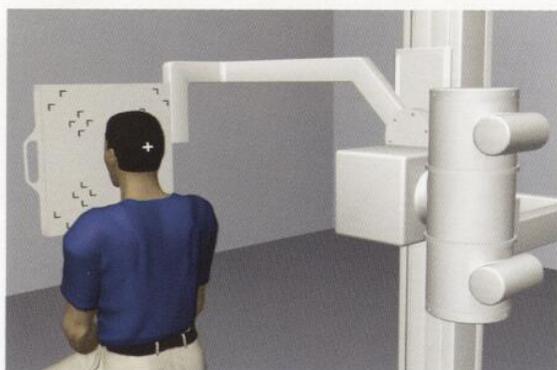
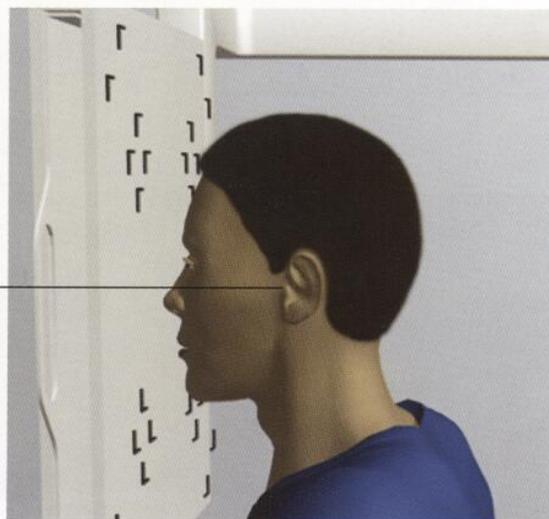
24×30 cm (10×12 inches) for face

Use a **R**ight or **L**eft marker

Exposure values	mAs	
	"blue" system 200	"green" system 400/450
Average	50	20
Range	40–63	16–25

1. Bring in the patient, put the cassette in the cassette holder. Collimate to the format.
2. Remove dentures, hairgrips, or anything from the hair.
3. Position the patient. The line between the lower bony edge of the eye and the ear opening must be at a right angle to the cassette holder.
4. Center corresponding to the root of the nose between the eyes.  
Collimate further, if possible.
5. Expose.

Horizontal line between the lower bony edge of the eye and the ear



## SINUSES, FACE or NOSE LATERAL Sitting erect

BASIC (nose)    ADDITIONAL (sinuses and face)

If the patient is unable to sit, use the supine position (HEAD 4).

Do not use for children under 7 years of age, except for trauma or suspected tumors.

### Cassette speed

Cassette with screen-film combination, nominal speed 100/200/400 in the cassette holder

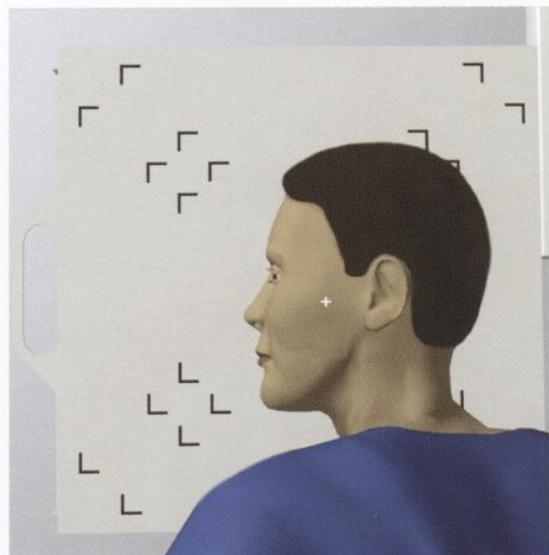
### Cassette size

18×24 cm (8×10 inches) for sinus

24×30 cm (10×12 inches) for face

Exposure values	mAs	
	80 kV	"blue" system 200
Average	12.5	5
Nose 53 kV	"blue" system 200	"green" system 100/63
Average	4	8

1. Bring in the patient, put the cassette in the cassette holder. Collimate to the format.
2. Remove dentures, earclips, hairgrips, or anything from the hair.
3. Position the right side of the patient's head next to the cassette holder.
4. Center as shown.  
Collimate further, if possible.
5. Expose.



**MANDIBLE PA**    **Sitting erect**    **BASIC****Cassette speed**

Cassette with screen-film combination,  
nominal speed 200/400 in the cassette holder

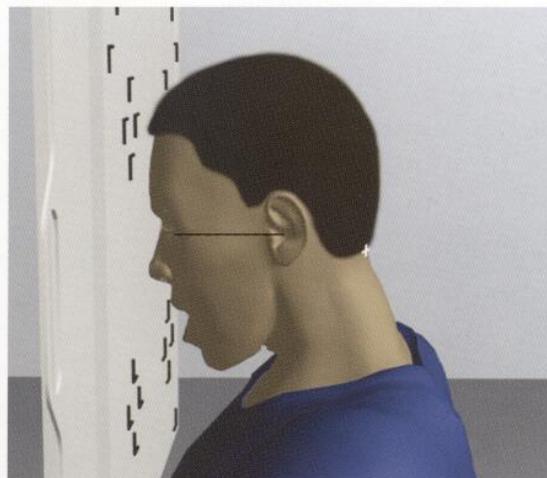
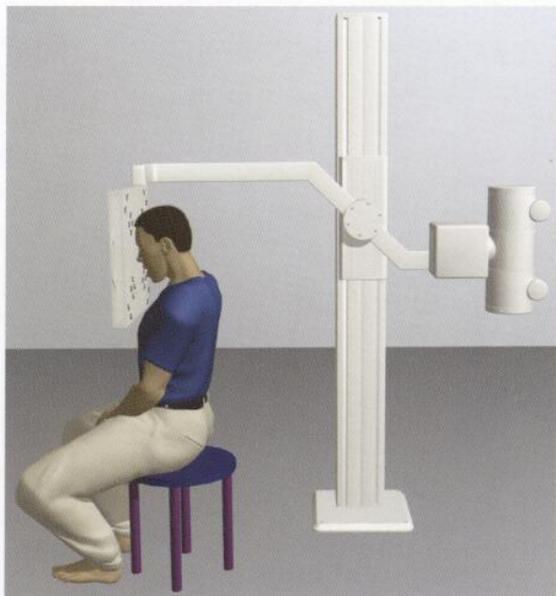
**Cassette size**

24×30 cm (10×12 inches)

Use a **R** or **L** marker

Exposure values	"blue" system 200	"green" system 400
70 kV	63 mAs	32 mAs

1. Bring in the patient, put the cassette in the cassette holder. Collimate to the format.
2. Remove dentures, hairgrips, or anything from the hair.
3. Tell the patient to open the mouth as widely as possible and place the forehead and nose against the cassette holder. The line from the outer corner of the eye to the ear opening shall be at right angle to the cassette holder.
4. Center as shown.  
Collimate further, if possible.
5. Expose.



## MANDIBLE OBLIQUE LATERAL Sitting erect (right or left) – horizontal beam angled 15° as shown BASIC

### Cassette speed

Cassette with screen-film combination, nominal speed 200/400 in the cassette holder

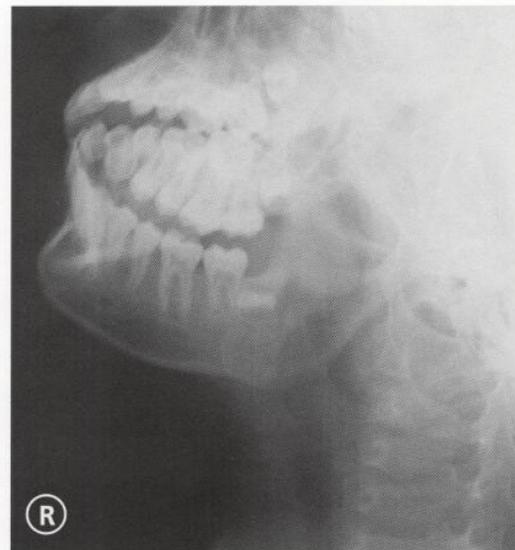
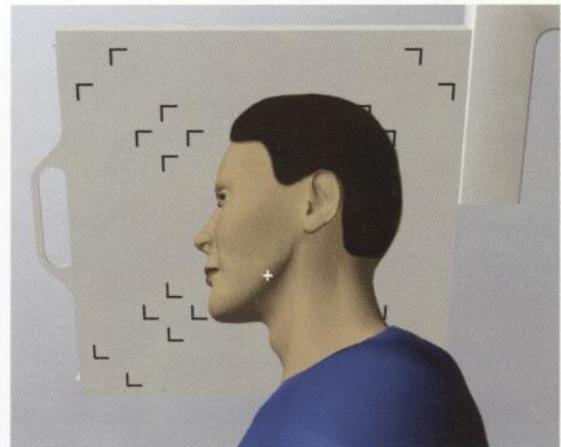
### Cassette size

18×24 cm (8×10 inches)

Use a **Right** or **Left** marker

Exposure values	"blue" system 200	"green" system 400
70 kV	12.5 mAs	6.3 mAs

1. Bring in the patient, put the cassette in the cassette holder. Collimate to the format.
2. Remove dentures, hairgrips, or anything from the hair.
3. Angle the X-ray tube 15° as shown.
4. Ask the patient to sit with the side of the head to be X-rayed nearest to the cassette holder. (Right side shown).
5. Tilt the head inwards 15° as shown, so that the head and shoulder rest against the cassette holder.
6. Center as shown.  
Collimate further, if possible.
7. Expose.



**MANDIBLE AP**    **Supine – vertical beam angled 30° as shown**    **ADDITIONAL****Cassette speed**

Cassette with screen-film combination,  
nominal speed 200/400 in the cassette holder

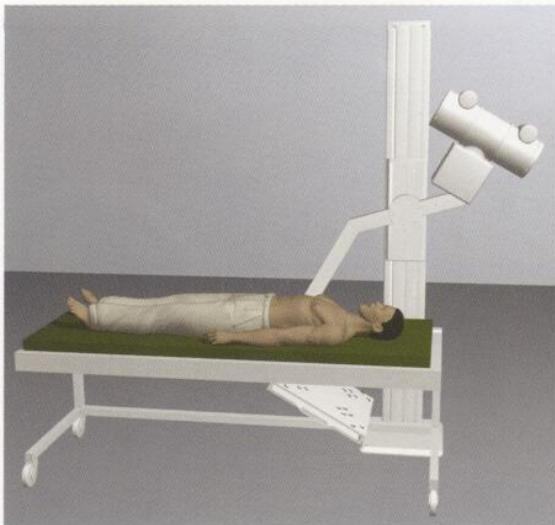
**Cassette size**

24×30 cm (10×12 inches)

Use a **R** or **L** marker

Exposure values	"blue" system 200	"green" system 400
70 kV	63 mAs	32 mAs

1. Bring in the patient, put the cassette in the cassette holder. Collimate to the format.
2. Remove dentures, hairgrips, or anything from the hair.
3. Tell the patient to open the mouth as widely as possible. If the patient is unable to keep the mouth open place a wedge of soft wood or cork between upper and lower row of teeth or gums. The line between the lower bony edge of the eye and the ear opening must be at a right angle to the the examination table.
4. Center as shown.  
Collimate further, if possible.
5. Expose. Remove wedge of cork.



## MANDIBLE OBLIQUE LATERAL Lying on the side (right or left) – vertical beam angled 15° as shown ADDITIONAL

### Cassette speed

Cassette with screen-film combination, nominal speed 200/400 in the cassette holder

### Cassette size

18×24 cm (8×10 inches)

Use a **R**ight or **L**eft marker

Exposure values	"blue" system 200	"green" system 400
70 kV	12.5 mAs	6.3 mAs

1. Bring in the patient, put the cassette in the cassette holder. Collimate to the format.
2. Remove dentures, hairgrips, earrings, or anything from the hair.
3. Angle the X-ray tube 15° as shown.
4. Position the patient with the side to be X-rayed nearest to the table. (Right side shown).
5. Tilt the patient's head 15° as shown.
6. Center as shown.  
Collimate further, if possible.
7. Expose.

