

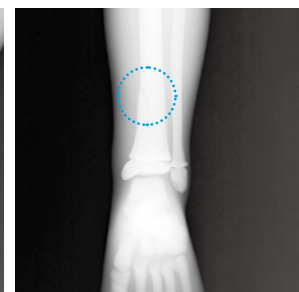
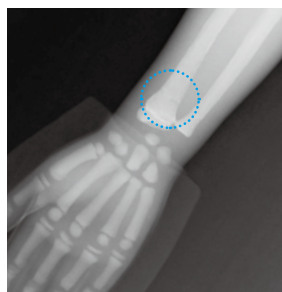
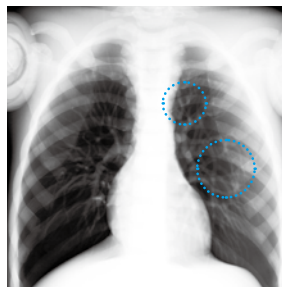
PH-2D | 41350-500

# Bone Fracture Pediatric Phantom "PBU-70B"



Improve skills in detecting bone fractures in children and cultivate awareness of child maltreatment.

ANTHROPOMORPHIC PHANTOMS



## FEATURES

- | Training in pediatric radiography can be enriched with clear and subtle bone fractures
- | Typical fractures resulting from child abuse are also included
- | Radiology absorption and HU number approximate to human body
- | Main joints have close-to-human articulation
- | Phantom can be disassembled into 10 individual parts

## APPLICATIONS

- | Plain X-ray
- | CT
- | Basic patient positioning
- | Radiographic interpretation

## CONCEPT and ANATOMY - Is there sign of abuse?

### Child maltreatment

Children around the world are victims to domestic violence and abuse, yet the problem is often overlooked. Noticing the signs of an abusive fracture of a child is the first step to putting an end to these maltreatments. This phantom has been designed and developed to cultivate such observation skills in future radiologists and radiographers.

<b>Signs of callus</b>	A number of callus examples can be a result of abusive treatment. This particular model contains calluses in the wound healing phase 5.
<b>Supracondylar humerus fracture</b>	A supracondylar humerus fracture on the distal humerus above the epicondyles and is a fracture commonly observed in children, accounting for approximately 20%.
<b>Spiral fracture</b>	Certain causes of non-accidental pediatric injuries, such as spiral fractures, include maltreatment stimulated by anger or distress.
<b>Back, scapula and rib fractures</b>	Rib fractures close to the vertebrae may be potential indicators of the child being thrown.
<b>Skull fractures</b>	A linear skull fracture may be another indication of child maltreatment. At times, fractures display better on x-ray scans than CT imaging.

## DESCRIPTIONS

### SET INCLUDES

1 pediatric whole body phantom	1 screwdriver
1 head supporter	1 set of sample X-ray data (DVD)
1 hand fixture belt	1 manual

### SPECIFICATIONS

Phantom height:  
110 cm 43.3 in  
Phantom weight:  
20 kg / 44 lb  
Packing size:  
W86×D60×H32 cm  
W33.8×D23.6×H12.6 in

### REPLACEMENT PARTS

41350-500-01	Head for PH-2D with head stand
41350-500-02	Forearm-hand left for PH-2D (Closed fingers)
41350-500-03	Upper Arm left for PH-2D
41350-500-04	Trunk for PH-2D
41350-500-05	Thigh left for PH-2D
41350-500-06	Leg and foot left for PH-2D

### MATERIALS

Soft tissue: urethane based resin (density: 1.06)  
Synthetic bone: epoxy resin (density: 1.31)  
Skull: epoxy resin (density: 1.11)  
\*Phantom has no metal parts or liquid structure

### OPTIONAL PARTS

41363-080	storage case for PH-2C / 2D
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### PUBLICATION REFERENCES

L. J. O. Lanca<sup>1</sup>, M. W. Bowdler, J. Creedon, V. Dayer, N. Stensholt, V. Stuivenberg, S. Pinhao<sup>1</sup>, M. Visser, J. Jorge, Paediatric phantom dose study using digital radiography with variation of exposure parameters and filtration ECR2018 C-0986 DOI: 10.1594/ecr2018/C-0986

