

# Forelimb Anomaly (Newfoundland Forelimb Anomaly, Elbow Anomaly)

## What is it?

An orthopedic condition causing severely bowed front limbs that appear almost dwarfed. The hind limbs are not affected.



## What causes it?

Premature closure of the distal ulnar physis. The growth plate at the far end of the ulna near the wrist stops growing. The radius continues to grow and since it is constricted by the shortened ulna, bows out from underneath the humerus. In severe cases, the radius has moved so far out from under the humerus that the ulna becomes the main weight bearing bone of the front legs. Can be diagnosed from 8 weeks on. Some cases don't show up at 8 weeks. Puppies have a bowed front similar to the dwarf breeds.

## Signs & Symptoms

Puppies have difficulty negotiating the whelping box. They have difficulty bending their elbows, so the shoulder is used to raise the front. Dogs that are affected on both front legs rarely limp as both legs are bad.

## Testing & Treatment

### How is it diagnosed?

Radiographs of the front legs are characteristic in moderately affected dogs. Bowing of the front legs on a puppy is also characteristic, but can be difficult to see if not familiar with the condition.

### How is it treated?

Very early surgical intervention, before the radius has bowed too much, can be helpful, but isn't always rewarding. Medical management consists of weight control, pain medication as necessary and exercise restriction.

## Prognosis:

Dependent on severity. Some arthritis of the elbows will develop eventually. More severe cases will develop arthritis earlier. Very severe puppies are generally euthanized by the breeder.

## Breeding implications/genetics:

A genetic basis is suspected. Environmental influences can't be ruled out. This condition has been diagnosed in Newfoundlands from all over the world, from multiple lines and has also been diagnosed in Bernese Mountain Dogs, Tibetan Mastiffs, Akitas and Nova Scotia Duck Tolling Retrievers.

## More Information:

[www.newfoundlandforelimbanomaly.com](http://www.newfoundlandforelimbanomaly.com)

*This information is not meant to be a substitute for veterinary care.*

*Always follow the instructions provided by your veterinarian.*

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