

# Report Sample

Helping physicians improve the quality of their reports is a key goal for the AANEM. The report template below is based on the AANEM's educational paper Reporting the Results of Nerve Conduction Studies and Needle EMG. A report template helps the EDX physician adhere to and document required procedures —by checking them off a list. This process will help the EDX physician complete a thorough analysis of the patient's

history, physical, and EDX data that will improve diagnostic accuracy and result in better quality patient care. The template also will help laboratories applying for the laboratory accreditation program meet the criteria used to evaluate EDX reports. The template was developed listing the key elements for an EDX standard report excluding F-wave, H-reflex, and repetitive stimulation studies. Physicians are strongly urged to utilize this template to improve their reports.

**Patient Name:**  
**Patient Address:**

**Lab Name, address, phone number:**  
**Referring Physician:** Dr. X

**History and Physical Examination**

A 46-year-old right-handed female with a past medical history of right carpal tunnel syndrome status post release surgery and remote breast cancer status post right-sided mastectomy was referred for an EDX examination for worsening nocturnal and positionally provoked numbness and tingling in her left hand over the last 3 years. Symptoms are relieved with shaking out her hand. A brief general examination was remarkable for lymphedema of the right upper extremity and a well-healed scar over the right carpal tunnel. A brief neurological examination demonstrated normal deep tendon reflexes, normal strength and sensation in both upper extremities. These EDX studies were performed to evaluate for a suspected left carpal tunnel syndrome (CTS).

**NCS Examination**

For sensory nerve conduction studies, the amplitude is measured peak-to-peak, the latency reported is the peak latency, and the conduction velocity, if measured, is determined from onset latencies and is calculated over the forearm.

For motor nerve conduction studies, the amplitude is measured baseline-to-peak, the latency reported is the onset latency, and the conduction velocity is calculated over the forearm.

**Limb temperature:** 32.8° C

NERVE CONDUCTION STUDIES [*Abnormal results; †AANEM Normative Data Task Force reference values (where applicable)]										
Type of Study	Side/ Nerve	Stimulation Site	Recording Site	Distance <sup>‡</sup>	AMP	Reference Value <sup>‡</sup>	Latency	Reference Value <sup>‡</sup>	Conduction Velocity	Reference Value <sup>‡</sup>
Sensory	Left Median	Wrist	Index	14cm	14µV	(>13 µV)	3.9ms	(<4.0 ms)		
Mixed	Left Median	Palm	Wrist	7cm	55µV	(>8 µV)	2.5ms*	(<2.3 ms)		
Motor	Left Median	Wrist	APB	8cm	13.5mV	(>4.2 mV)	4.1ms	(<4.4ms)		
	Left Median	Elbow/Wrist	APB	24cm	12.9mV	(>4.2 mV)	8.3ms		57 m/s	(>51m/s)
Sensory	Left Ulnar	Wrist	Digit V	14cm	12µV	(>8 µV)	3.4ms	(<4.0 ms)		
Mixed	Left Ulnar	Palm	Wrist	8cm	25µV	(>12 µV)	2.0ms	(<2.3 ms)		
Motor	Left Ulnar	Wrist	ADM	8cm	8.2mV	(>7.9 mV)	3.1ms	(<3.7 ms)		
	Left Ulnar	Elbow/wrist	ADM	21cm	8.0mV	(>7.9 mV)	6.9ms		55m/s	(>52 m/s)

**EMG Examination**

The study was performed with a concentric needle electrode.

Needle EMG Results									
Side	Muscle	Insertional Activity	Spontaneous Activity			Voluntary Activity			
			Positive Sharp Waves	Fibrillation	Fasciculation	Amplitude	Duration	%Polyphasic	Recruitment
Left	Deltoid	Normal	0	0	0	Normal	Normal	Normal	Normal
Left	Biceps	Normal	0	0	0	Normal	Normal	Normal	Normal
Left	Triceps	Normal	0	0	0	Normal	Normal	Normal	Normal
Left	Pronator Teres	Normal	0	0	0	Normal	Normal	Normal	Normal
Left	Extensor Indicis	Normal	0	0	0	Normal	Normal	Normal	Normal
Left	Flexor Pollicis Longus	Normal	0	0	0	Normal	Normal	Normal	Normal
Left	First Dorsal Interosseous	Normal	0	0	0	Normal	Normal	Normal	Normal
Left	Abductor Pollicis Brevis	Normal	0	0	0	Normal	Normal	Normal	Normal

**Findings**

- The left median mixed nerve conduction study was ABNORMAL: The peak latency was prolonged with orthodromic stimulation of the palm.
- The left median sensory nerve conduction study revealed normal peak latency and amplitude.
- The left median motor nerve conduction study revealed normal onset latency, amplitude and conduction velocity.
- The left ulnar sensory and mixed nerve conduction studies revealed normal peak latencies and amplitudes.
- The left ulnar motor nerve conduction study revealed normal onset latency, amplitude and conduction velocity with elbow flexed at 90 degrees.
- Needle examination with a concentric needle electrode of selected muscles of the left upper extremity was normal.

**Diagnostic Interpretation**

- The results of the study were ABNORMAL.
- The findings were compatible with a very mild left median mononeuropathy at or distal to the wrist, consistent with a clinical diagnosis of carpal tunnel syndrome.
- There was no electrodiagnostic evidence of a more proximal left median nerve pathology, left ulnar mononeuropathy, or left cervical motor radiculopathy in the areas tested (left C5-C8/T1-innervated muscles).

**Notes:**

Right upper limb comparison studies were not performed due to lymphedema following right mastectomy. In comparison with a prior normal EDX study of the left upper limb done on 02/15/08, today's study demonstrates interval development of the left median neuropathy, as mentioned in #2 above.

**Physician Signature:**  
**EDX Physician, MD, 1/10/11, 2:00 PM**

- ← Patient Demographics
- ← Reason for Referral
- ← Description of History and Physical Exam
- ← Limb Temperature >32°C UE, >30°C LE
- ← Tabular NCS Data:
  - Side & Nerve
  - Stimulation & Recording Site
  - SNAP/CMAP Amplitude
  - Distal Peak or Onset Latency
  - Conduction Velocity
- ← Reference Values
- ← Tabular EMG Data:
  - Side
  - Muscle Tested
  - Activity Data
  - Voluntary
  - Insertional
  - Spontaneous
- ← Description of Findings
- ← Probable Diagnosis & Location of Pathology
- ← Study Limitations & Previous Study Information
- ← Signature with Time Stamp