



### Diagnostic Neuropathology Guidance ST3-6

In order to assist trainees and trainers with regard to the expectations for training in Diagnostic Neuropathology between ST3 and ST6, the following indicative numbers have been provided as a guide for Annual Review of Competence Progression (ARCP) process, outlined in section 4 of the [Gold Guide](#). These are provided as a guide only and assessed **competency should take precedence over numbers**.

After one year of histopathology and three years of neuropathology training, it is suggested that Diagnostic Neuropathology trainees in a GMC-approved training programme aspire to have achieved or perhaps exceeded the following indicative numbers:

- ~150 brain cuts (& spinal cords) removed at autopsy
- ~1000 neurosurgical biopsy specimens
- ~150 skeletal muscle biopsies
- ~40 peripheral nerve biopsies
- ~300 cerebrospinal fluid cytological preparations

ARCP reviewers should be aware that trainees who enter from the clinical neurosciences do a year of histopathology and those from histopathology a year equivalent in neurosciences, so that opportunities to reach the indicative numbers may vary. Available numbers will also depend on a case load which can also vary from centre to centre. If there are areas of persistent deficit the ARCP panel should consider recommending appropriate remedial action which may include external attachments (N.B. these must be approved by the GMC in advance if not done so already).

Cases reported/examined		Indicative numbers per year	Indicative cumulative number for ST3-6
Surgical neuropathology		250	1000
	Adult	200	
	Paediatric	50	
CSF preparations		75	300
Muscle biopsies		40	150
Nerve biopsies		10	40
Autopsy histology		20	80
Adult Autopsies		20	80



<b>Brain cuts</b>		<b>40</b>	<b>150</b>
	Adult	80%	
	Paediatric and perinatal	20%	

**Notes:**

**Surgical Neuropathology:** This should include a range of neuro-samples including a good proportion of tumours requiring further molecular testing and some non-tumour samples. Approximately one quarter to a third should be intraoperative smears/frozen sections.

**Nerve biopsies:** It is recognised that many centres now receive very few nerve biopsies and trainees will probably have to seek experience outside their training base and may also have to rely on review of archived material.

**Autopsy histology:** Relates to non-neurological tissues. The trainee is expected to be able to assess histology of visceral organs (heart, lung, liver, kidney, endocrine etc.) for common pathologies and post-mortem changes. Log all neurological and general autopsies for which microscopy of major organs has been undertaken. Cases requiring examination of post-mortem muscle and nerve should be included where possible. If the same case also requires formal neuropathological examination and is performed by the trainee, this can be additionally logged under the "Brain Cut" heading.

**Adult Autopsies:** The trainee should aim to gain experience in as wide a range of autopsies and special techniques as possible. This should include both general and specialist neuropathological autopsies. The trainee should be able to demonstrate competence in evisceration, skull opening and brain removal, toxicology blood/vitreous collection, toxicology interpretation, nerve/muscle sampling, anterior/posterior spinal cord removal, vertebral artery dissection, face dissection, eye removal, sympathetic chain removal, posterior fossa dissection etc. Special techniques should be logged and signed off by the ES/CS.

Sample Logbook for ARCP

Logbook	Indicative numbers
Surgical neuropathology cases: <ul style="list-style-type: none"> <li>- Adult</li> <li>- Paediatric</li> <li>- Intraoperatives (smear/frozen 80/yr)</li> </ul>	/250
CSF	/75
Muscle biopsies	/40
Nerve biopsies	/10
Autopsy histology	/20
Autopsies <ul style="list-style-type: none"> <li>- Spinal cord (front/back)</li> <li>- Evisceration (10/yr)</li> <li>- Skull opening (10/yr)</li> <li>- Special techniques (e.g. eye, ear, vertebral arteries, major plexus etc.)</li> <li>- Toxicology</li> </ul>	/20 adult
Brain cut <ul style="list-style-type: none"> <li>- Adult</li> <li>- Paediatric</li> </ul>	/40
Audit	/1
Quality activity (year 3 or 4):	/1 project
Research arrangements (if any)	