



PROPOSAL: UPDATE RATES FOR TESTING AT THE ANIMAL HEALTH LABORATORY

What is MPI proposing?

Following a full costing review The Ministry for Primary Industries (MPI) proposes to:

- Update all rates charged by the Animal Health Laboratory (AHL) for commercial testing
- Change the pricing structure so one rate is offered per test.

What are the services being provided?

AHL provide diagnostic testing services for exotic and emerging diseases, export certification and health monitoring. AHL offer over 450 tests in bacteriology, virology, immunology and molecular diagnostic testing and test a range of animals for diseases, including pets, livestock, aquatic animals, zoo animals and wildlife.

Why are we making these changes?

Rates charged by AHL were last updated seven years ago, when a blanket 5% increase was applied. Prior to this a full costing review had not been carried out since 2008. Given annual expenditure has increased by 14% since 2012 and methodology, lab supplies and equipment used to carry out tests has changed, rate reviews are necessary.

How were new rates calculated?

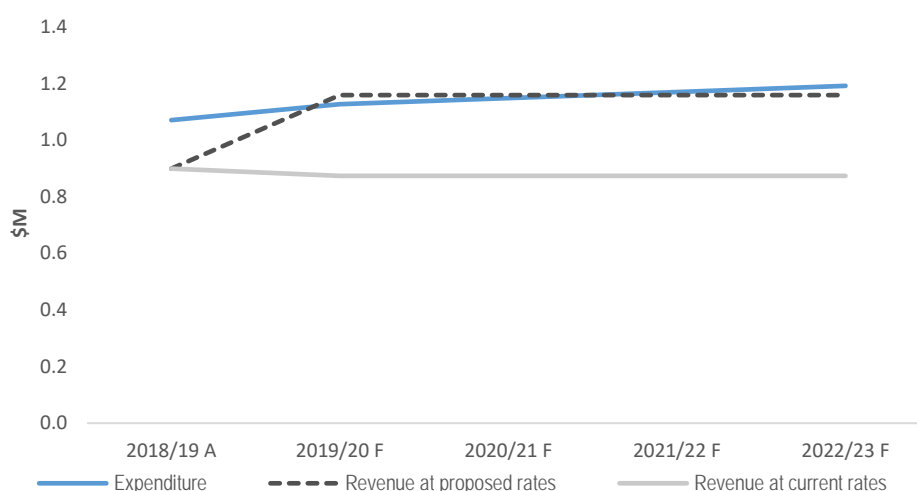
AHL maintain capability for Crown readiness and response purposes in addition to that required to carry out commercial tests. This includes higher staff levels, increased staff capability and higher specification equipment than required for just commercial testing. The cost of this Crown 'premium' has been quantified and removed from the costs allocated to commercial testing rates.

Proposed rates have been calculated based on the amount of staff time needed to perform a test and the equipment and lab supplies used, plus overheads. AHL recovers costs for carrying out testing, with no profit margin.

What does it cost AHL to deliver these services?

We forecast it will cost AHL an average of \$1.2 million per year over the next four years to deliver commercial testing. AHL received \$0.9 million in third party revenue in 2018/19.

Figure 1: Estimated annual expenditure and revenue related to commercial testing:



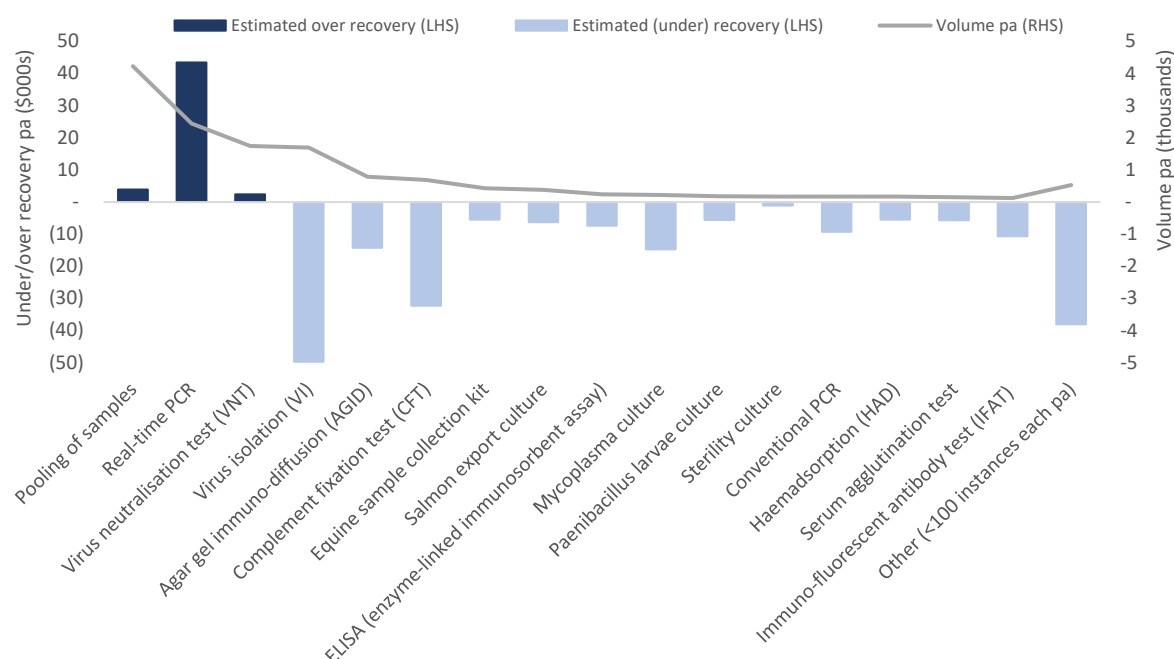


What are the changes proposed?

Update all rates charged by AHL for commercial testing.

Some tests were found to cost more than AHL is currently charging (31), while eight cost less. Five tests drive over 70% of volume. For the top three of these five tests, rate decreases are proposed. For the other two tests we are proposing rate increases. This is illustrated in figure 2 which shows volume per test and estimated over- or under-recovery, over-recovery indicates rate decreases are proposed, while under-recovery indicates rate increases are proposed.

Figure 2: Volume of samples per annum per test and estimated annual under/over-recovery:



News fees are being introduced for tests that have to be carried out in high containment or risk group 3 conditions, to account for the significant staff time required (see Appendix 1 for proposed rates). This fee will be charged only once per submission regardless of the number of samples.

Change the pricing structure so one rate is offered per test.

One rate will be charged regardless of the number of samples submitted together, as opposed to the single vs multiple pricing structure currently used at AHL. AHL is usually able to group commercial and non-commercial tests and rarely performs tests with just one sample, and is therefore pricing accordingly. Sub-contracted testing will continue to be charged at cost.

What impact will this have on people who pay the fees?

AHL has over 130 customers and impacts will vary depending on the number and types of samples being submitted and the tests being requested. Example case studies of common submissions that may be relevant to your area of work are outlined in Appendix 2.

What impact will this have on AHL?

Volumes are forecast to remain constant, therefore we expect revenue to AHL to increase by \$0.3 million per year. Rate changes may impact future volumes.



Appendix 1: Service catalogue and proposed rates:

		Volume pa	Current rates		Proposed rates
	Test Type	Cost Recovered	First Sample	Additional Sample	All samples
#	Virology	# samples	NZD	NZD	NZD
1	Haemagglutination (HA)	0	65	55	Discontinued
2	Haemadsorption (HAD)	171	65	55	
3	Haemagglutination inhibition (HI)	24	40	32	
4	Virus isolation (VI (per passage, per cell line)	1,698	65	65	
5	Virus neutralisation test (VNT)	1,745	80	60	
Bacteriology					
6	<i>Paenibacillus</i> larvae (American foulbrood, AFB) culture	182	65	50	85
7	<i>Bacillus anthracis</i> testing	1	570	570	1,083
8	General bacterial culture	2	145	120	69
9	Bacterial Identification (ID) by traditional/ MALDI-ToF	2	145	120	150
10	<i>Campylobacter</i> culture	1	145	120	206
11	<i>Tylorella equigenitalis</i> (contagious equine metritis, CEM) culture	2	145	120	396
12	Salmon export culture	384	80	65	82
13	Fungal culture	3	145	120	72
14	Fungal Identification (ID) by traditional	3	145	120	177
15	General aquatic culture	92	145	120	87
16	Aquatic Bacterial Identification (ID) by traditional/ MALDI-ToF	92	145	120	184
17	<i>Mycoplasma</i> culture	225	275	225	307
18	<i>Salmonella</i> export culture	26	100	85	197
19	Sterility culture	173	145	120	137
20	<i>Perkinsus</i> culture	1	80	65	203
Immunology					
21	Card agglutination test (<i>Brucella canis</i>) (CARD)	28	60	55	80
22	Complement fixation test (CFT)	694	40	32	80
23	ELISA (enzyme-linked immunosorbent assay)	242	80	60	94
24	Immuno-fluorescent antibody test (IFAT) (<i>Ehrlichia canis</i> , <i>Leishmania</i>)	126	120	80	185
25	Microscopic agglutination test (MAT) (leptospirosis)	87	60	32	344
26	<i>Trichinella</i> pepsin digest	1	190	110	557
27	Serum agglutination test (SAT)	147	60	32	76
28	Agar gel immuno-diffusion (AGID)	791	45	30	51
Molecular Testing					
29	Sequencing analysis	2	350	200	161
30	DNA barcoding	1	215	135	245
31	Conventional PCR (polymerase chain reaction)	172	215	135	233
32	Nested conventional PCR (polymerase chain reaction)	9	215	135	292
33	Real-time PCR (polymerase chain reaction)	2,443	190	110	117
Pathology					
34	Fish histology	31	80	60	116
35	Fish necropsy	1	85	85	178
Sample Handling					
36	DNA extraction for subcontracted testing	3	60	50	151
37	Packaging and handling for subcontracted tests	86	40	40	32
38	Pooling of samples (per sample)	4,230	7	7	6
39	Swabs, transport media etc.	460	New fee	New fee	39
40	Equine sample collection kit	428	35	35	48
Other					
41	After hours work	25	165 + mileage	210 + mileage	210
42	Risk group 3 fee	7	New fee	New fee	496
43	High containment fee	190	New fee	New fee	588


Appendix 2: Case studies of 'typical' submissions showing impacts of proposed rate changes:

Case Study	Description	Current cost	Proposed cost	Change \$	Change %
CASE STUDY 1	Horses imported to NZ, quarantine release (10 samples):				
	• Aar Gel Immuno-Diffusion (AGID)	\$315	\$510	\$195	62%
	• Real-time PCR	\$1,180	\$1,170	(\$10)	(1%)
	• Virus Neutralisation Test (VNT)	\$620	\$600	(\$20)	(3%)
	• High containment fee	\$0	\$588	\$588	
	Total	\$2,115	\$2,868	\$753	36%
CASE STUDY 2	Export of live cattle (2 samples):				
	• Complement fixation test (<i>B. abortus</i>)	\$72	\$160	\$88	122%
CASE STUDY 3	Commercial livestock breeding centres for export testing (10 samples):				
	• Virus Neutralisation Test (BVD and IBR)	\$620	\$600	(\$20)	(3%)
CASE STUDY 4	Bovine product testing to meet GMP requirements (5 samples):				
	• Sterility culture	\$625	\$685	\$60	10%
	• Mycoplasma culture	\$1,175	\$1,535	\$360	31%
	• Virus Isolation (2 passages)	\$650	\$940	\$290	45%
	Total	\$2,450	\$3,160	\$710	29%
CASE STUDY 5	Salmon farms, testing for surveillance/export (12 samples):				
	• Virus Isolation (2 passages)	\$1,560	\$2,256	\$696	45%
	• Salmon export culture	\$795	\$984	\$189	24%
	• Real-time PCR (Whirling disease)	\$1,400	\$1,404	\$4	0%
	Total	\$3,755	\$4,644	\$889	24%
CASE STUDY 6	Poultry export (5 samples):				
	• Real-time PCR (AI & NDV)	\$630	\$585	(\$45)	(7%)
	• VNT (IBD)	\$320	\$300	(\$20)	(6%)
	• High containment fee	\$0	\$588	\$588	
	Total	\$950	\$1,473	\$523	55%
CASE STUDY 7	Family importing dog from Australia to NZ (1 sample):				
	• CARD	\$60	\$80	\$20	33%
	• ELISA	\$80	\$94	\$14	18%
	• MAT	\$60	\$344	\$284	473%
	• High containment fee	\$0	\$588	\$588	
	Total	\$200	\$1,106	\$906	453%
CASE STUDY 8	General diagnostic testing, example from a zoo (1 sample):				
	• Fungal culture	\$145	\$72	(\$73)	(50%)
	• Fungal identification	\$145	\$177	\$32	22%
	Total	\$290	\$249	(\$41)	(14%)
CASE STUDY 9	Bee health testing, part of AFB management programme (1 sample):				
	• AFB culture	\$65	\$85	\$20	31%
	• Real-time PCR (AFB)	\$190	\$117	(\$73)	(38%)
	Total	\$290	\$249	(\$53)	(21%)