COUNTRY REPORTS FOR AVIAN PARAMYXOVIRUSES 2006

Based on responses to the questionnaire received by 05/05/2007

Laboratories responding to questionnaire

Austria

Belgium

Bulgaria

Czech Rep.

Denmark

Finland

France

Germany

Greece x 2

Hungary

Italy

Latvia

Lithuania

Luxembourg

Netherlands

UK GB

Norway

Poland

Slovenia

Slovakia

Sweden

Switzerland

UK N. Ireland

Virus isolation attempts in eggs 2006 for APMVs TISSUES

Bird	Number	No. countries
chickens	1384	14
turkeys	79	8
ducks & geese	632	8
game birds etc	52	4
ostriches	8	5
pigeons	647	10
cage, zoo & Q	88	2
Wild birds/others	119	7
TOTAL	3014	

Virus isolation attempts in eggs 2006 for APMVs SWABS

Bird	Number	No. countries
chickens	1832	8
turkeys	135	8
ducks & geese	390	6
game birds etc	211	3
ostriches	248	5
pigeons	299	6
cage, zoo & Q	22	3
Wild birds/other	1901	8
TOTAL	5012*	*881 oropharyngeal, 3903 cloacal, 228 "swabs"

Why aren't the numbers for inoculation of eggs the same for avian influenza and APMVs?

APMV-1 detection by RT-PCR 2006 TISSUES

Bird	Number	No. countries
chickens	547	9
turkeys	17	3
ducks & geese	2	2
game birds etc	11	2
pigeons	55	5
cage, zoo & Q	7	1
wild birds	90	4
TOTAL	729	

APMV-1 detection by RT-PCR 2006 SWABS

Bird	Number	No. countries
chickens	353	6
turkeys	46	2
ducks & geese	93	3
game birds etc	94	5
pigeons	197	4
cage, zoo & Q	24	2
wild birds	3897	6
TOTAL	4694*	*1654 oropharyngeal, 2971 cloacal, 69 "swabs"

Virus isolation - laboratories with no avian paramyxoviruses isolated or detected

- Luxembourg
- Lithuania
- Norway
- Poland
- Slovenia
- Switzerland

APMV-1 viruses isolated by country Austria 2006

Bird	ICPI	F0 cleavage site	mAb	geno group	Conclusion
pigeon	1.2	RRQRRF	nd	nd	PPMV-1
pigeon	8.0	RRQKRF	nd	nd	PPMV-1

APMV-1 viruses isolated by country Belgium 2006

Bird	ICPI	F0	mAb	geno	Conclusion
		cleavage site		group	
chickens	nd	RRQKRF	Р	nd	ND[PPMV-1]
pigeon x 9	nd	RRQKRF	Р	nd	PPMV-1
swan	nd	RQGRL	?	nd	lentogenic

In addition La Sota vaccine was isolated from chickens x 3 and pheasants x 1]

APMV-1 viruses isolated by country Bulgaria 2006

Bird	ICPI	F0	mAb	geno	Conclusion
		cleavage site		group	
chickens x 4	nd	RRQKRF	nd	5d	NDV
turkeys x 1	nd	RRQKRF	nd	5d	NDV
swan	nd	GRQGRL	nd	2	lentogenic

APMV-1 viruses isolated by country Czech Republic 2006

Bird	ICPI	F0	mAb	geno	Conclusion
		cleavage site		group	
collared dove	0.35	RRQKRF	nd	nd	PPMV-1
collared dove	0.06	nd	nd	nd	?
swan	0.12	nd	nd	nd	?

APMV-1 viruses isolated by country Finland 2006

Bird	ICPI	F0 cleavage site	mAb	geno group	Conclusion
teal x 3	nd	nd	nd	nd	?
pochard	nd	nd	nd	nd	?

APMV-1 viruses isolated by country France 2006

Bird	ICPI	F0 cleavage site	mAb	geno group	Conclusion
Meat pigeons	nd	RRQKRF	nd	4b	PPMV-1
Turkey	0.0	GKQGRL	nd	1	Lentogenic
Turkey	nd	GRQGRL	nd	2	Lentogenic
Pheasant	nd	GRQGRL	nd	2	Lentogenic
Duck	0.4	GKQGRL	nd	2	Lentogenic
Mallard x3	0.5	GKQGRL	nd	1	Lentogenic
Collared Dove	0.9-1.3	RRQKRF	nd	4a	Virulent

APMV-1 viruses isolated by country Germany 2006

Bird	ICPI	F0	mAb	geno	Conclusion
		cleavage site		group	
pigeons x 13	0.7-1.5	nd	Р	nd	PPMV-1
wild waterfowl	1.29	RRQKRF	Р	nd	PPMV-1
wild waterfowl x 3	nd	nd	not P	nd	?

APMV-1 viruses isolated by country Greece 2006

3 uncharacterised APMV-1 viruses isolated from wild ducks

APMV-1 viruses isolated by country Hungary 2006

Bird	ICPI	F0 cleavage site	mAb	geno group	Conclusion
hens	1.80	RRQKRF	nd	5d	NDV
hens	1.88	RRQKRF	nd	5d	NDV
hens	1.80	RRQKRF	nd	5d	NDV
hens	1.90	RRQKRF	nd	5d	NDV

APMV-1 viruses isolated by country Italy 2006

Virulent viruses

Bird	ICPI	F0 cleavage site	geno group	Conclusion
pigeons x 38	0.7-1.3	RRQKRF	4b	PPMV-1
collared doves x13	0.7-1.3	RRQKRF	4b	PPMV-1

APMV-1 viruses isolated by country Italy 2006

Low virulence viruses

Bird	ICPI	F0 cleavage site	geno group	Conclusion
broiler	0.2	GKQGRL	1	vaccine
turkey	0.5	GKQGRL	1	lentogenic
domestic duck	0.6	GRQGRL	2	lentogenic
teal	0.1	GKQGRL	1	lentogenic
teal	nd	EKQGRL	1	lentogenic

APMV-1 viruses isolated by country Latvia 2006

Bird	ICPI	F0	mAb	geno	Conclusion
		cleavage		group	
		site			
pigeon	0.9	KRQKRF	nd	nd	PPMV-1?
pigeon x 3	nd	KRQKRF	nd	nd	PPMV-1?

APMV-1 viruses isolated by country The Netherlands 2006

Turkey 3 x APMV-1(lentogenic by PCR)

Poultry 1 x APMV-1(lentogenic by PCR)

Unknown 1 x APMV-1(lentogenic by PCR)

APMV-1 viruses isolated by country Slovakia 2006

Virulent viruses

Bird	ICPI	F0 cleavage site	geno group	Conclusion
pigeons x 12	nd	RRQKRF	4biif	PPMV-1
turtle doves x 22	nd	RRQKRF	4biif	PPMV-1
turtle doves x 5	nd	RRKKRF	4biif	PPMV-1
pigeons x 2	nd	RRKKRF	4biif	PPMV-1
turtle dove x 1	nd	RRKKRF	4biie	PPMV-1
wild duck	nd	GKQGRL	1	lentogenic

APMV-1 viruses isolated by country Sweden 2006

Bird	ICPI	F0 cleavage site	mAb	geno group	Conclusion
layers	nd	RRQRRF	nd	5b	NDV
layers	nd	GKQGRL	nd	1	lentogenic

APMV-1 viruses isolated by country UK N. Ireland 2006

Bird	ICPI	F0 cleavage site	mAb	geno group	Conclusion
ducks	nd	ERQERL	nd	6	lentogenic
ducks	nd	GKQGRL	nd	1	lentogenic

APMV-1 viruses isolated by country UK GB 2006

Bird	ICPI	F0 cleavage site	mAb	geno group	Conclusion
Turkeys	0.025	GRQGRL	nd	2	lentogenic
Pigeons	nd	RRQKRF	nd	4b	PPMV1

Other APMVs isolated 2006

- ostriches Germany 1 x APMV-3
- teal Italy 1 x APMV-4
- mallard, duck- France- 2 x APMV-4
- Mallard France 1 x APMV-6
- wild ducks Germany 1 x APMV-6
- wild ducks N. Ireland 2 x APMV-6
- wild ducks Italy 7 x APMV-6
- wild waterfowl Germany 1 x APMV-8
- Chickens UK 2 x APMV-2

APMV-1 viruses reported 2006 SUMMARY

VELOGENIC APMV-1 viruses isolated from:

Type of bird	Number isolates	genotype	Number countries
Poultry	1	4b	1
poultry	1 [10]	5b	1 [5]
poultry	9 [6]	5d	2 [1]
Poultry	97	Nd	1
	[2005 fig	gures]	

PPMV-1 viruses reported 2006 SUMMARY

Type of bird	No isolates	No countries
pigeons and doves	128 (180) [73]	9 (9) [11]
chickens	1	1
other wild birds	1	1
grey partridge	2	1
	(2005) [2004]	

CONCLUSIONS

- Five countries reported outbreaks ND in 2006 compared to 7 in 2005.
- PPMV-1 in pigeons and doves remains a problem and a continuing threat to poultry. PPMV-1 virus was isolated from chickens in Belgium and Grey Partridges in the UK.