

## *Appendix D: Included Studies – Epidemiology review*

Empty box indicates rate not stated/no data available

<b>General Medicine</b>									
<b>Study</b>	<b>Year</b>	<b>Country</b>	<b>Sample Size</b>	<b>Age (Mean, SD)</b>	<b>Diagnostic Criteria</b>	<b>Prevalence %</b>	<b>Incidence %</b>	<b>Occurrence %</b>	<b>Total Delirium %</b>
Pitkala (64)	2005	Finland	230	Not given	DSM IV	32.6			
Edund (21)	2006	Sweden	400	Not given	OBS/DSM IV	31.3			
Holden (34)	2008	NZ	216	Not given	CAM	23.4		5.7	29.1
McCusker (51)	2003	Canada	1552	83.6 (7.4)	CAM	19.3		3	22.3
Rockwood (69)	1999	Canada	247	79	DRS, DSM IV	18.7			
Cole (16)	1994	Canada	484	Not given	CAM	18			
Martin (49)	2000	Canada	156	76.4 (6.5)	CAM		17.9		
Leslie (45)	2005	US	919	80 (6.5)	CAM		12.5		
O'Keefe (58)	1999	Eire	225	Not given	DSM III			42	42
Naughton (57)	2005	US	374	81 (6.2)	CAM			40.9	
Adamis (7)	2005	UK	94	82.1 (6.2)	CAM/DRS			37.3	
Faezah (25)	2008	Singapore	400	Not given	CAM			28	
Inouye (36)	1998	US	107	Not given	CAM			25	25
Jones (39)	2006	US	491	79 (6)	CAM			22	22
Inouye (37)	1999	US	196	Not given	CAM			18	
Inouye (38)	1998	US	727	78.9 (6.9)	CAM			16	
Inouye (36)	1998	US	174	Not given	CAM			15	15

<b>Stroke Medicine</b>									
<b>Study</b>	<b>Year</b>	<b>Country</b>	<b>Sample Size</b>	<b>Age (Mean, SD)</b>	<b>Diagnostic Criteria</b>	<b>Prevalence %</b>	<b>Incidence %</b>	<b>Occurrence %</b>	<b>Total Delirium %</b>
Caeiro (15)	2004	Portugal	190	63.6 (12.8)	DRS/DSM IV	12			
Henon (33)	1999	France	202	75	DRS/DSM IV			24.3	24.3

<b>HIV/AIDS Medicine</b>									
Study	Year	Country	Sample Size	Age (Mean, SD)	Diagnostic Criteria	Prevalence %	Incidence %	Occurrence %	Total Delirium %
Uldall (78)	2000	US	110	42	CAM/DSM IV			12	12
Breitbart (14)	1996	US	244	39.2 (8.8)	DRS/DSM III			12	12
Study	Year	Country	Sample Size	Age (Mean, SD)	Diagnostic Criteria	Prevalence %	Incidence %	Occurrence %	Total Delirium %
<b>Medical ICU</b>									
Ely (24)	2001	US	111	55.3 (17.4)	CAM-ICU/DSM IV			83.3	83.3
Milbrandt (53)	2004	US	224	56 (17)	CAM-ICU/RASS			81.7	81.7
Pisani (63)	2006	US	178	74.2 (8.3)	CAM-ICU			80	80
McNicol (52)	2003	US	118	76	CAM-ICU			61.8	61.8
Peterson (62)	2006	US	614	52.5 (17.5)	CAM-ICU/RASS	36.6	24.4		61
Thomason (77)	2005	US	261	56 (18)	CAM-ICU/RASS			48	48
Lin (47)	2004	Taiwan	102	73.9 (3.5)	CAM-ICU			22.4	
<b>Surgical ICU</b>									
Pandharipande (60)	2008	US	100	Not given	CAM-ICU/RASS			70	
Robinson (68)	2009	US	144	64 (9)	CAM-ICU			44	44
Robinson (67)	2008	US	49	64 (7)	CAM-ICU			43	43
Balas (10)	2007	US	114	75	CAM-ICU/RASS			29.8	29.8
<b>Trauma ICU</b>									
Angles (9)	2008	US	69	44 (2)	CAM-ICU			59	
<b>General ICU</b>									
Roberts (66)	2005	Australia	185	61	ICDSC			45	45
Ouimet (59)	2007	Canada	820	Not given	ICDSC			31.8	31.8
Van Rompaey (80)	2009	Belgium	523	64	NEECHAM			30	
Dubois (18)	2001	Canada	216	Not given	ICDSC			19	

<b>Emergency Department</b>									
Study	Year	Country	Sample Size	Age (Mean, SD)	Diagnostic Criteria	Prevalence %	Incidence %	Occurrence %	Total Delirium %

DRAFT FOR CONSULTATION

Han (32)	2009	US	341	Not given	CAM-ICU	11.1			11.1
Lewis (46)	1995	US	385	Not given	CAM	10			10
Naughton (56)	1995	US	188	79.7 (6.5)	CAM	9.6			9.6
Elie (23)	2000	Canada	447	Not given	CAM	9.6			9.6

<b>General Surgery</b>									
<b>Study</b>	<b>Year</b>	<b>Country</b>	<b>Sample Size</b>	<b>Age (Mean, SD)</b>	<b>Diagnostic Criteria</b>	<b>Prevalence %</b>	<b>Incidence %</b>	<b>Occurrence %</b>	<b>Total Delirium %</b>
Koebrugge (43)	2009	Holland	73	Not given	DSM IV			24	
Greene (30)	2009	US	100	64.6 (7.7)	CAM			16	
Franco (26)	2001	US	500	Not given	CAM			11.4	
Rudolph (73)	2007	US	1161	68.9 (5.9)	DSM III			9	
Marcantonio (48)	1994	US	1341	68 (9)	CAM			9	
<b>Orthopaedics (Acute Hip Fracture)</b>									
Edlund (20)	2001	Sweden	101	79.5 (7.7)	OBS/DSM IV	29.7		18.8	48.5
Furlaneto (27)	2006	Brazil	103	Not given	CAM	16.5	12.5		29
Goldenberg (29)	2006	US	77	81.9 (7.5)	CAM	22	48.1		68.1
<i>Santana (75)</i>	<i>2005</i>	<i>Brazil</i>	<i>34</i>	<i>Not given</i>	<i>CAM/DSM IV</i>			55.9	
Bickel (12)	2008	Germany	200	73.8 (9)	CAM			41	41
Galanakis (28)	2001	Germany	105	74.9	CAM			40.5	
<i>Edlund (22)</i>	<i>1999</i>	<i>Sweden</i>	<i>54</i>	<i>77</i>	<i>DSM IV</i>			28	
Milisen (54)	2001	Belgium	60	80	CAM			23.3	
Morrison (55)	2003	US	541	Not given	CAM			16	
Holmes (35)	2000	UK	731	82.1	DRS			14.8	
Kagansky (40)	2004	Israel	137	82.5 (5.3)	CAM			11.4	
Brauer (13)	2000	US	571	Not given	CAM			9.5	
<b>Orthopaedics (Elective)</b>									
Contin (17)	2005	Spain	236	Not given	DSM III			22	
Galanakis (28)	2001	Germany	105	74.9	CAM			14.7	
Bickel (12)	2008	Germany	200	73.8 (9)	CAM			12.5	
<b>Orthopaedics (Spinal Surgery)</b>									
Kawaguchi (42)	2006	Japan	341	59.2	CAM			3.8	

<b>Cardiac Surgery</b>									
<b>Study</b>	<b>Year</b>	<b>Country</b>	<b>Sample Size</b>	<b>Age (Mean, SD)</b>	<b>Diagnostic Criteria</b>	<b>Prevalence %</b>	<b>Incidence %</b>	<b>Occurrence %</b>	<b>Total Delirium %</b>
Rudolph (72)	2006	US	80	Not given	CAM			50	
<i>Rudolph (71)</i>	2005	US	36	68.8 (9)	CAM			41.7	
Santana (74)	2004	Brazil	220	Not given	DSM IV			33.6	
Rolfson (70)	1999	Canada	71	Not given	CAM			32	
Koster (44)	2008	Holland	112	70 (7.3)	DSM IV			21	
Van der Mast (79)	1999	Holland	296	63 (11)	DSM IIIR			13.5	
<b>Vascular Surgery</b>									
Benoit (11)	2005	Canada	102	Not given	DSM IV			33	
Sasajima (76)	2000	Japan	110	71.6 (6.6)	CAM			29.1	
<b>Neurosurgery</b>									
Ramirez (65)	2006	Mexico	202	Not given	DSM IV			14.9	14.9
<b>Hepatobiliary surgery</b>									
Yoshimura (81)	2004	Japan	100	Not given	CAM			17	
<b>Urology</b>									
Hamann (31)	2005	Germany	100	71.9	CAM			7	
<b>Gynaecology</b>									
McAlpine (50)	2008	Canada	103	Not given	CAM			17.5	

Psychiatry									
Study	Year	Country	Sample Size	Age (Mean, SD)	Diagnostic Criteria	Prevalence %	Incidence %	Occurrence %	Total Delirium %
Patten (61)	1997	Canada	401	35.5	DSI DSM IV			2.8	

Long term care									
Study	Year	Country	Sample Size	Age (Mean, SD)	Diagnostic Criteria	Point Prevalence%	Incidence %	Occurrence %	Total Delirium %
Pitkala (64)	2005	Finland	195	Not given	DSM IV	15.9			

**Key:**

Studies highlighted in *italics* and shaded in blue indicate those felt to present high potential for bias and hence were excluded from the analysis.

Studies shaded in yellow are those assessed to be of low quality and which were considered in sensitivity analyses

DRAFT FOR CONSULTATION