

Adverse Events Following Immunizations in the CAF – 2010-2023

	Unique Identifier # (Year/Unit Identification Number (UIC)/Report Sequence Number)	Vaccines	Adverse Event
2010			
	2010-3544-001	Fluviral	Oculo-respiratory-Syndrome
	2010-3574-001	Havrix Engerix Imovax-Polio MMR-II	Anaphylactic reaction
	2010-3574-002	MMR-II Boostrix	Injection site cellulitis
	2010-3578-001	Adacel YF-Vax	Fever >38°C & Rash at injection site
	2010-3578-001	Ixiaro	Leg Tingling/Numbness
	2010-3586-002	Boostrix Fluviral	Injection site reaction
2011			
	2011-3570-001	Menactra Imovax-Polio	Injection site cellulitis
	2011-3570-002	Fluviral	Anaphylactic reaction
	2011-3574-001	Imovax-rabies Havrix Typhim-Vi Menveo	Anaphylactic reaction
	2011-3574-002	FSME-Immun Imovax-Polio Menveo	Gastrointestinal
	2011-3574-003	Boostrix FSME-Immun ¹	Injection site reactions Lymphadenopathy
	2011-3574-004	Havrix Engerix Fluviral Imovax-Rabies Varivax	Injection site reactions
	2011-3589-001	Havrix Engerix MMR	Seizure non-febrile
2012			
	2012-3584-001	Fluviral	Rash
	2012-3584-002	Varivax-III	Injection site reactions
	2012-3589-001	Adacel	Injection site cellulitis

¹ FSME-Immun is not normally reported to DFHP (and ultimately PHAC) but rather to Regulatory Affairs (and ultimately HC SAP).

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	2012-3956-001	YF-Vax Typhim-Vi	Injection site cellulitis
	2012-3574-001	Adacel Typherix	Rash
2013			
	2013-3584-001	MMR-II	Injection site reaction
	2013-3956-001	Imovax-Polio MMR-II Adacel Twinrix	Allergic skin reaction
	2013-3956-002	Havrix Engerix Imovax-Polio MMR-II	Injection site reactions - Hives
	2013-3956-003	Fluviral	Leg Tingling/Numbness
	2013-3956-004	Gardasil	Injection site reaction
	2013-3588-001	Immovax-Polio Adacel Typherix	Lymphadenopathy
	2013-3582-001	Gardasil	Local reaction - oedema temporal
	2013-3584-001	Fluviral	Injection site reaction
	2013-3584-002	Adacel Fluviral Adacel-Polio	Injection site reaction
2014			
	2014-3544-001	YF-Vax	Arthritis/Arthralgia; rash; Fever >38°C
	2014-3588-001	Td Adsorbed Imovax-Polio Varivax-III	Local reaction - erythema
	2014-3589-001	YF-Vax Typhim-Vi Menveo	Injection site reactions
	2014-3956-001	Menveo Typhym-Vi YF-Vax	Injection site reactions
	2014-6399-001	Adacel Menveo Imovax-Polio Fluviral	Injection site cellulitis
	2014-6399-002	Varivax YF-Vax	Injection site reactions
	2014-6399-003	Imovax-rabies	Brachial Neuritis

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	2014-3579-001	Pneumovax	Injection site cellulitis
2015			
	2015-3574-001	Fluzone	Local injection reaction – shoulder pain
	2015-3574-002	Boostrix	Local injection reaction
	2015-3956-001	Imovax-Rabies	Rash
	2015-3956-003	Fluzone	Injection site cellulitis
	2015-3956-004	Fluzone	Local injection reaction – intense neck pain and headache
	2015-3581-001	Recombivax Menveo Imovax rabies MMR II	Guillain-Barré Syndrome
	2015-3586-001	Ixiaro	Local injection reaction – teeth & gums pain
	2015-3589-001	MMR II Imovax Rabies Recombivax Havrix	Loss of consciousness and jitters
2016			
	2016-3570-001	Gardasil	Local injection reaction – shoulder pain
	2016-3956-001	Adacel	Injection site cellulitis
	2016-3574-001	Menveo	Local injection reaction Fever Gastrointestinal
	2016-3589-001	Adacel	Local injection reaction
2017			
	2017-3544-001	Fluzone	Local injection reaction – shoulder & elbow pain
	2017-3586-001	Havrix Varivax-III	Injection site & other local reactions
	2017-3956-001	Gardasil-9 Flulaval Tetra	Local injection reaction – shoulder pain
	2017-3956-002	Havrix Engerix Adacel Imovax-Polio	Local injection reaction – multiple nodules
2018			
	2018-3570-001	Gardasil-9 Imovax-Polio Varivax-III	Injection site cellulitis
	2018-3578-001	Pneumovax	Local injection reaction

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	2018-3581-001	Menactra Imovax-Polio	Guillain-Barré Syndrome
	2018-3581-002	Imovax Engerix Menactra	Anaphylactic reaction
	2018-3581-003	Engerix Imovax Menactra MMR	Anaphylactic reaction
	2018-3584-001	FSME-Immun	Vertigo - dizziness
	2018-3956-001	Bexsero	Local injection reaction - nodules
	2018-3801-001	Imovax-Polio Typhim-Vi	Rash
2019			
	2019-2569-001	Flulaval Tetra Gardasil 9 Havrix	Acute Myopericarditis
	2019-3569-002	Flulaval Tetra	Jitters & Heart palpitations
	2019-3570-001	Menactra Typhim-Vi	Hyperglycemia
	2019-3956-001	Gardasil-9	Other local reactions – erythema
	2019-3956-002	Gardasil-9	Other local reactions – prutitus
	2019-3956-003	YF-Vax Fluviral	Local injection reaction - nodules
	2019-3579-001	Flulaval Tetra	Other local reactions – eye redness & oedema
2020			
	2020-3579-001	Imovax-Polio	Other local reactions - pain
	2020-3579-002	Adacel Ixiaro	Other local reactions - pain
	2020-3579-003	Menactra Imovax-Polio	Other local reactions - rash
	2020-2106-001	Varivax Havrix 1440 Engerix B Menactra Imovax-Polio TD Adsorbed	Injection site cellulitis
	2020-6923-001	Afluria Tetra	Myocarditis
	2020-6923-002	Afluria Tetra	Chest pain & Shortness of breath
	2020-3570-002	Flucelvax Quad	Prolonged Nausea
	2020-3584-001	Afluria Tetra	Brachial neuritis
	2020-3582-001	Flucelvax Quad	Tongue tingling

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	2020-3377-001	Afluria Tetra	Nausea and vomiting
	2020-3574-001	Imovax-Polio Gardasil 9 Flucelvax Quad	Nausea, diarrhea, sore throat and fever
	2020-2801-001	Gardasil9	Pelade and Eczema
	2020-3574-002	Flucelvax Quad	paresthesia
	2020-3985-001	Flulaval Tetra	Flushing/erythema face
2021			
1	2021-3544-001	Moderna	Tachycardia, flushing, urticarial, prickle sensation, nausea, numbness, tingling
2	2021-3584-001	Moderna	Induration, redness, swelling
	2021-3568-001	Shingrix	Numbness, fatigue and myalgia in right leg
3	2021-3586-001	Moderna	Delayed erythema, pruritus, pain and tenderness
4	2021-3589-001	Moderna	Delayed, swelling, pain, erythema, rash
5	2021-3589-002	Moderna	10 cm delayed swelling, pain, erythema, rash
6	2021-3589-003	Moderna	Shingles like rash on abdomen
7	2021-3591-001	Moderna	Delayed swelling, tenderness, regional bilateral lymphadenopathy, arthritis, joint pain
8	2021-3591-002	Moderna	Delayed swelling, erythema, warmth,
9	2021-3584-002	Moderna	Delayed, warmth, erythema, pain, swelling
10	2021-3591-003	Moderna	Delayed 9 cm erythema
11	2021-3589-004	Moderna	Delayed 24 days redness, swelling, induration, 1x episode vomiting and abdominal pain
	2021-3570-001	Afluria Tetra Td Adsorbed	Pruritus back of thighs, moved down to calves, then resolved
12	2021-3589-005	Moderna	Fever, vertigo
13	2021-3586-002	Moderna	Loss of taste (ageusia)
14	2021-3801-001	Moderna	delayed erythema 20 cm
15	2021-3569-003	Moderna	Fogginess, cloudiness, memory loss
16	2021-3569-001	Moderna	Tingling erythema jaw neck

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17	2021-3570-002	Moderna	Tenderness to axilla at day 4; induration and erythema at injection site on day 7 delayed
18	2021-3584-003	Moderna	Erythema and swelling around the injection site, few swollen lymph nodes on Rt side of neck.
19	2021-3586-002	Moderna	Inability to taste (ageusia) food 24hrs after – negative COVID
20	2021-3956-001	Moderna	Pruritic red rash delayed 9 days
21	2021-3801-001	Moderna	Delayed rash
22	2021-3579-001	Moderna	Delayed localised erythema
23	2021-3579-002	Moderna	Chills fever 39.1N
24	2021-3579-003	Moderna	COVID arm delayed
25	2021-3574-001	Moderna	Localized reaction and chills unwell
26	2021-3574-002	Moderna	Delayed menstrual cycle
27	2021-3574-003	Moderna	Delayed menstrual cycle
28	2021-3569-002	Moderna	Delayed hypersensitivity reaction
29	2021-3570-003	Moderna	Anaphylaxis (possibly other)
30	2021-3579-004	Moderna	General malaise, chills
	2021-3544-002	Engerix Varivax III Menactra	Syncope
31	2021-2104-001	Moderna	DVT
32	2021-3584-004	Moderna	Tachycardia, blurred vision, induration swelling
	2021-3579-006	Dukoral Ixiaro Imovax-Rabies	Induration, light headed, weakness
	2021-3589-006	YF-vax Gardasil Dukoral Ixiaro menactra	Swelling induration, erythema, knee and feet
33	2021-3589-007	Moderna	Anaphylaxis
	2021-3581-001	Engerix Adacel Imovax-polio Afluria-tetra Menactra MMR-II VArivax	Facshiite nécrosante bras gauche
34	2021-3570-004	Moderna	Anaphylaxis

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35	2021-3544-003	Moderna	Seizures
36	2021-4869-001	Moderna	Anaphylaxis
37	2021-3570-005	Moderna	Severe Anxiety
38	2021-3584-005	Moderna	Delayed hypersensitivity cutaneous reaction
39	2021-3574-004	Moderna	Severe anxiety
40	2021-3574-005	Moderna	Excessive intercourse bleeding
41	2021-3574-006	Moderna	Slight tongue swelling
42	2021-3544-004	Moderna	Angioedema, urticaria, lip
43	2021-3584-006	Moderna	Angioedema tongue lip, Mouth, blotchy rash on neck - transient and not urticarial
44	2021-3577-001	Moderna	Sensation of throat closure, difficulty swallowing
45	2021-3577-002	Moderna	Pruritus forehead and palms
46	2021-3569-004	Moderna	Paraesthesia, Left facial tingling from forehead down
47	2021-3582-001	Moderna	Delayed hypersensitivity cutaneous reaction
48	2021-3574-007	Moderna	urticarial rash on arms and legs only
49	2021-3574-008	Moderna	Pruritus arm legs
50	2021-3576-001	Moderna	Prickle sensation lips
51	2021-3582-002	Moderna	Tingling numb sensation thong
52	2021-3544-005	Moderna	Thong swelling
53	2021-3544-006	Moderna	Headache/migraine
54	2021-3544-007	Moderna	Delayed Erythema, edema and warmth to 10cm area of deltoid
55	2021-3570-006	Moderna	Shingles reactivation
56	2021-3570-007	Moderna	Shingles reactivation
57	2021-3571-001	Moderna	Temporary hearing loss/tinnitus
58	2021-3571-002	Moderna	Delayed hypersensitivity cutaneous reaction (Dx as cellulitis)
59	2021-3574-009b	Moderna	Delayed paresthesia/arthritis
60	2021-3577-003	Moderna	angioedema
61	2021-3544-008	Moderna	Chest pain on inspiration, SOB with increased activities
62	2021-3584-007	Moderna	Delayed hypersensitivity cutaneous reaction/lymphadenopathy
63	2021-3956-002	Moderna	DVT in pregnancy

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64	2021-4869-002	Moderna	Swelling, pain , tenderness, fever
65	2021-3569-005	Moderna	Heavy headache
66	2021-3581-002	Moderna	Persistent hand/arthritis pain
67	2021-3588-001	Moderna	Dizziness, itchy rash sore throat
68	2021-3589-008	Moderna	Anaphylaxis
69	2021-3586-003	Moderna	Prickle sensation mouth
70	2021-3578-001	Moderna (2 ^e dose)	Prickle sensation tongue
71	2021-3581-004	Moderna	Hand joint pain
72	2021-3946-001	Moderna	Spontaneous abortion
73	2021-6399-001	Moderna (2 ^e dose)	Hearing loss left hear
74	2021-3581-003	Moderna	Pericardite
75	2021-2106-001	Moderna	Mastitis
76	2021-3569-006	Moderna (2 ^e dose)	Body hives
77	2021-3570-008	Moderna (2 dose)	Angioedema
78	2021-3571-003	Moderna (2 ^e dose)	Loss consciousness, lip tingling, vomitting
79	2021-3574-010	Moderna	bruising
80	2021-3956-003	Moderna	Rash, zoster
81	2021-3956-004	Moderna (2 ^e dose)	Localized rash
82	2021-6923-001	Moderna	Rash, GI symptoms
83	2021-6923-002	Moderna	Lymphadenopathy
84	2021-6923-003	Moderna	Loss of taste (ageusia)
85	2021-3570-009	Moderna (2 ^e dose)	Weakness, SOB, nausea and becoming dizzy/lightheaded with exertion
86	2021-4869-003	Moderna (2 ^e dose)	Erythematous rash, gastrointestinal
87	2021-3574-011	Moderna	Blurred vision and suffered multiple syncopal episodes
88	2021-3574-012	Moderna	Pruritus
89	2021-3577-004	Moderna (2 ^e dose)	Pulmonary emboli
90	2021-3577-005	Moderna (2 ^e dose)	Pruritus, angioedema
91	2021-3570-009	Moderna (2 ^e dose)	Diff breathing, swallow

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92	2021-1244-001	Moderna (2e dose)	Maculopapular rash arms
93	2021-3544-010	Moderna (2e dose)	Tongue tingling
94	2021-3544-011	Moderna (2e dose)	tightness and pressure in chest and a tingling sensation in his arms
95	2021-3570-010	Moderna (2e dose)	feeling achy, there is a rash under his arm/palm, and hands
96	2021-3574-013	Moderna	Epigastric Pain with associated NVD and nocturnal fever chills o
97	2021-3574-014	Moderna (2e dose)	GBS
98	2021-3578-003	Moderna (2e dose)	Myocarditis
99	2021-3578-004	Moderna (2e dose)	Pericarditis
100	2021-3586-004	Moderna	Headache, hearing and tinnitus problems
101	2021-3985-001	Moderna	Left side face paresthesia
102	2021-3575-001	Moderna (2e dose)	Fetal not visible IVF 2 weeks prior to vaccination
103	2021-3575-002	Moderna (2e dose)	fever, fatigue, dizziness, headache and photophobia
104	2021-3576-002	Moderna	Mild headache
105	2021-3576-003	Moderna	Menstrual cycle delay
106	2021-3576-004	Moderna	Demyelinating neuropathy
107	2021-3589-009	Moderna (2e dose)	Heart inflammation (Dx Myocarditis)
108	2021-3569-007	Moderna (2 ^e dose)	Mild-moderate bilateral pleural effusion of uncertain etiology. "
109	2021-3584-008	Moderna (2e dose)	Menstrual cycle issues
110	2021-3584-009	Moderna (2e dose)	Menstrual cycle issues
111	2021-3579-007	Moderna	Rhabdomyolysis
112	2021-3579-008	Moderna (2e dose)	Rhabdomyolysis
113	2021-3584-010	Moderna (2e dose)	Heavy menstrual bleeding
114	2021-6399-002	Varivax Imovax-polio Havrix	Varicella type rash

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		Typhim YF-vax	
115	2021-2104-002	Moderna (2e dose)	Persistent nausea
116	2021-3569-008	Moderna	Bell's palsy
117	2021-3801-002	Moderna (2° dose)	Anesthesie, hypokaliemie
118	2021-3589-010	Pfizer	Moderate allergy reaction
119	2021-3544-012	Moderna	Anaphylaxis
120	2021-3697-001	Moderna (2° dose)	Bilateral polyarthralgia
121	2021-3570-011	Moderna	Severe anxiety, chest tightness
122	2021-3581-006	Moderna	Bell's palsy
123	2021-3581-005	Moderna Gardasil Biomedical influenza Boostrix Varivax Immovax polio Menactra	Local reaction
124	2021-3544-009	Moderna	Chest pain left side of chest radiating out in left arm
125	2021-3544-013	Gardasil	Allergic reaction resolved
126	2021-6399-003	Pfizer	Chest pain
127	2021-3577-008	Moderna (2 nd dose)	Pericarditis
128	2021-3579-009	Moderna	hemochromatosis
2022			
1	2022-3589-001	Moderna 3e	Mild allergic reaction
2	2022-3589-002	Moderna 2e	Mild allergic reaction
3	2022-3584-001	Moderna 1st	Chest pain
4	2022-3584-002	Moderna 3e	Delayed generalized rash urticaria
5	2022-0142-001	Moderna 3e	Delayed generalized rash urticaria
6	2022-3584-002	Moderna 3e	Delayed generalized urticaria
7	2022-3581-001	Moderna 3rd	Post vaccine localized paresthesia
8	2022-3581-002	Moderna 3e	Delayed generalized rash urticaria
9	2022-3581-003	Moderna 3e	Delayed generalized rash urticaria
10	2022-3581-004	Pfizer 3e (2st Moderna) Flulaval Menactra	Delayed generalized rash urticaria

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		Imovax polio Boostrix	
11	2022-3581-005	Moderna 3e	Delayed generalized rash urticaria
12	2022-3581-006	Moderna 3e	Delayed generalized rash urticaria
13	2022-3581-007	Pfizer 3e Flulaval Menactra Immovax polio Boostrix MMR II	Delayed generalized rash urticaria
14	2022-3581-008	Moderna 3e	Delayed generalized rash urticaria
15	2022-3581-009	Pfizer 3e (Pfizer 1 st and Moderna 2e)	Delayed generalized rash urticaria
16	2022-3591-001	Moderna 3rd	Delayed generalized rash urticaria
17	2022-3544-001	Moderna 3rd	Delayed generalized rash urticaria
18	2022-3544-002	Moderna 3rd	Delayed generalized rash urticaria
19	2022-3544-003	Moderna 3rd	Delayed generalized rash urticaria
20	2022-3544-004	Moderna 3rd	Delayed generalized rash urticaria
21	2022-3544-005	Moderna 3rd	Delayed generalized rash urticaria
22	2022-3544-006	Moderna 3rd	Delayed generalized rash urticaria
23	2022-3544-007	Moderna 3rd	Delayed generalized urticaria pruritus
24	2022-3544-008	Moderna 3rd	Delayed generalized urticaria pruritus
25	2022-3544-009	Moderna 3rd	Delayed generalized rash urticaria
26	2022-3544-010	Moderna 3rd	Delayed generalized rash urticaria
27	2022-3544-011	Moderna 3rd	Delayed generalized urticaria erythema pruritus
28	2022-3544-012	Moderna 3rd	Delayed generalized rash urticaria
29	2022-3544-013	Moderna 3rd	Delayed generalized rash urticaria
30	2022-3586-001	Pfizer 3 rd (Moderna 2 first)	Mild immediate allergic reaction
31	2022-3571-001	Moderna 3 rd	Delayed generalized rash urticaria
32	2022-3544-014	Moderna 3 rd	Delayed generalized rash urticaria
33	2022-3577-001	Moderna 2 nd	Palpitations and chest pain
34	2022-3577-002	Moderna 2 nd	Delayed mild allergic reaction
35	2022-3577-003	Moderna 2 nd	Delayed generalized rash urticaria
36	2022-3577-004	Moderna 3 rd	Delayed generalized rash urticaria
37	2022-3577-005	Moderna 2 nd	Thyroid mass
38	2022-2106-001	Moderna 3 rd	Delayed generalized rash urticaria
39	2022-2106-002	Moderna 3 rd	Delayed generalized rash urticaria

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40	2022-2106-003	Moderna 3 rd	Delayed generalized rash urticaria
41	2022-2106-004	Pfizer 3 rd	Delayed rash
42	2022-2106-005	Moderna 3 rd	Fever, rash
43	2022-2106-006	Moderna 3 rd	Delayed generalized rash urticaria
44	2022-2106-007	Moderna 3 rd	Delayed generalized urticaria
45	2022-2106-008	Moderna 3 rd	Delayed urticaria
46	2022-2106-009	Moderna 3 rd	Delayed generalized urticaria
47	2022-2106-010	Moderna 3 rd	Delayed generalized rash urticaria
48	2022-2106-011	Moderna 3 rd	Delayed sensation of prickles
49	2022-2106-012	Moderna 3 rd	Delayed urticaria
50	2022-2106-013	Moderna 3 rd	Delayed generalized urticaria
51	2022-2106-014	Moderna 3 rd	Delayed generalized rash urticaria
52	2022-2106-015	Moderna 3 rd	Delayed generalized rash urticaria
53	2022-2106-016	Moderna 3 rd	Delayed generalized rash urticaria
54	2022-2106-017	Moderna 3 rd	Delayed generalized rash urticaria
55	2022-2106-018	Moderna 3 rd	Delayed generalized rash urticaria
56	2022-2106-019	Moderna 3 rd	Delayed generalized rash urticaria
57	2022-2106-020	Moderna 3 rd	Pericarditis
58	2022-2106-021	Moderna 3 rd	Delayed urticaria
59	2022-2106-022	Moderna 3 rd	Delayed urticaria
60	2022-2106-023	Moderna 3 rd	Delayed urticaria
61	2022-2106-024	Moderna 3 rd	Delayed urticaria
62	2022-2106-025	Moderna 1 st	Delayed urticarial pruritus
63	2022-2106-026	Moderna 3 rd	Delayed generalized rash urticaria
64	2022-2106-027	Moderna 3 rd	Delayed urticaria
65	2022-2106-028	Moderna 3 rd	Delayed urticaria
66	2022-2106-029	Moderna 3 rd	Delayed urticaria
67	2022-2106-030	Pfizer 3 rd	Pericarditis
68	2022-2106-031	Moderna 3 rd	Delayed urticarial pruritus
69	2022-2106-032	Moderna 3 rd	Delayed urticarial pupillary edema
70	2022-2106-033		Duplicate
71	2022-2106-034	Moderna 3 rd	Delayed urticaria
72	2022-2106-035	Moderna 3 rd	Delayed generalized rash urticaria
73	2022-2106-036	Moderna 3 rd	Delayed generalized rash urticaria
74	2022-3544-015	Moderna 3 rd	Delayed generalized urticaria
75	2022-2106-037	Moderna 3 rd	Delayed generalized rash urticaria
76	2022-2106-038	Moderna 3 rd	Delayed generalized rash urticaria
77	2022-2106-039	Moderna 3 rd	Delayed generalized rash urticaria
78	2022-3544-016	Moderna 3 rd	Delayed generalized rash urticaria
79	2022-3544-017	Moderna 3 rd	Delayed generalized urticaria
80	2022-2106-040	Moderna 3 rd	Delayed generalized rash urticaria
81	2022-2106-041	Moderna 3 rd	Delayed generalized urticaria

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82	2022-3689-004	Moderna 3 rd	Delayed generalized urticaria
83	2022-3589-005	Moderna 3 rd	Delayed generalized urticaria
84	2022-3589-006	Moderna 3 rd	Delayed generalized rash urticaria
85	2022-0208-001	Moderna 3 rd	Bell's Palsy
86	2022-2106-042	Moderna 3 rd	Delayed generalized rash urticaria
87	2022-2106-043	Moderna 3 rd	Delayed generalized rash urticaria
88	2022-2106-044	Moderna 3 rd	Delayed generalized rash urticaria
89	2022-2106-045	Moderna 3 rd	Delayed generalized rash urticaria
90	2022-3581-010	Moderna 3 rd	Delayed generalized rash urticaria
91	2022-3589-007	Moderna 3 rd	Delayed generalized rash urticaria
92	2022-3589-008	Moderna 3 rd	Delayed generalized rash urticaria
93	2022-3589-009	Moderna 3 rd	Delayed generalized rash urticaria
94	2022-3589-010	Moderna 3 rd	Delayed generalized rash urticaria
95	2022-3589-011	Moderna 3 rd	Delayed generalized rash urticaria
96	2022-3589-012	Moderna 3 rd	Delayed generalized rash urticaria
97	2022-3589-013	Moderna 3 rd	Delayed generalized rash urticaria
98	2022-3589-014	Moderna 3 rd	Delayed generalized rash urticaria
99	2022-3589-015	Moderna 3 rd	Delayed generalized rash urticaria
100	2022-3589-016	Moderna 3 rd	Delayed generalized rash urticaria
101	2022-3589-017	Moderna 3 rd	Delayed generalized rash urticaria
102	2022-3589-018	Moderna 3 rd	Delayed generalized rash urticaria
103	2022-3589-019	Moderna 3 rd	Delayed generalized rash urticaria
104	2022-3589-020	Moderna 3 rd	Delayed generalized rash urticaria
105	2022-3589-021	Moderna 3 rd	Delayed generalized rash urticaria
106	2022-3589-022	Moderna 3 rd	Delayed generalized rash urticaria
107	2022-3589-023	Moderna 3 rd	Diarrhea; enlarged lymph nodes
108	2022-3589-024	Moderna 3 rd	Delayed generalized rash urticaria
109	2022-3589-025	Moderna 3 rd	Delayed generalized rash urticaria
110	2022-3589-026	Moderna 3 rd	Delayed generalized rash urticaria
111	2022-3589-027	Moderna 3 rd	Delayed generalized rash urticaria
112	2022-3589-028	Moderna 1 st	Delayed generalized rash urticaria
113	2022-2106-046	Moderna 3 rd	Delayed generalized rash urticaria
114	2022-2106-047	Moderna 3 rd	Delayed generalized rash urticaria
115	2022-3581-011	Moderna 3 rd	Delayed generalized rash urticaria
116	2022-3581-012	Moderna 3 rd	Delayed generalized rash urticaria
117	2022-3578-001	Moderna 3 rd	Delayed generalized urticaria
118	2022-3578-002	Moderna 3 rd	Delayed generalized rash urticaria
119	2022-3578-003	Moderna 3 rd	Delayed generalized rash urticaria
120	2022-3578-004	Moderna 3 rd	Delayed generalized rash urticaria
121	2022-3578-005	Moderna 3 rd	Delayed generalized rash urticaria

	Unique Identifier # (Year/Unit Identification Number (UIC)/Report Sequence Number)	Vaccines	Adverse Event
122	2022-3578-006	Moderna 3rd	Delayed generalized rash urticarial, local swelling, respiratory allergic reaction
123	2022-3578-007	Moderna 3rd	Delayed generalized pruritus
124	2022-3578-008	Moderna 3rd	Localized pruritus and rash
125	2022-3578-009	Moderna 3rd	Delayed urticaria
126	2022-3578-010	Moderna 3rd	Delayed generalized pruritus erythema
127	2022-3578-011	Moderna 3 rd	Generalized pruritus urticaria
128	2022-3578-012	Moderna 3rd	Delayed generalized pruritus erythema
129	2022-3578-013	Moderna 3rd	Delayed generalized urticaria pruritus erythema
130	2022-3578-014	Moderna 3rd	Delayed generalized pruritus erythema, dry cough
131	2022-3578-015	Moderna 3rd	Delayed generalized urticarial, pruritus rash
132	2022-3578-016	Moderna 3rd	Delayed generalized urticarial, pruritus and itchy eye
133	2022-3578-017	Moderna 3rd	Delayed generalized urticarial, pruritus
134	2022-3578-018	Moderna 3rd	Delayed generalized pruritus
135	2022-3578-019	Moderna 3rd	Delayed generalized pruritus rash
136	2022-3578-020	Moderna 3rd	Delayed generalized pruritus rash
137	2022-3578-021	Moderna 3rd	Delayed generalized urticarial, pruritus
138	2022-3578-022	Moderna 3rd	Delayed generalized urticaria
139	2022-3578-023	Moderna 3rd	Delayed generalized urticarial, pruritus rash
140	2022-3578-024	Moderna 3rd	Delayed generalized urticaria
141	2022-3578-025	Moderna 3rd	Delayed generalized urticarial, pruritus rash
142	2022-3578-026	Moderna 3rd	Delayed generalized urticarial, pruritus and limbs swelling
143	2022-3578-027	Moderna 3rd	Delayed generalized urticarial, pruritus and limbs swelling
144	2022-3578-028	Moderna 3rd	Delayed generalized urticaria, erythema, pruritus
145	2022-3578-029	Moderna 3rd	Delayed generalized urticaria, dry cough
146	2022-6448-001	Moderna 3rd	Delayed generalized pruritus
147	2022-6448-002	Moderna 3rd	Delayed generalized urticaria, swelling throat-neck

	Unique Identifier # (Year/Unit Identification Number (UIC)/Report Sequence Number)	Vaccines	Adverse Event
148	2022-3544-018	Moderna 3rd	Delayed generalized urticaria rash
149	2022-3544-019	Moderna 3 rd	Delayed generalized urticarial rash
150	2022-4869-004	Moderna 3rd	Delayed generalized urticaria pruritus rash
151	2022-4869-005	Moderna 3rd	Delayed generalized urticaria rash
152	2022-3544-020	Moderna 3rd	Delayed generalized urticaria erythema pruritus
153	2022-3544-021	Moderna 3rd	Delayed generalized urticaria
154	2022-3544-022	Moderna 2nd	Delayed generalized urticaria
155	2022-3544-023	Moderna 3rd	Delayed generalized urticaria
156	2022-2106-048	Moderna 3rd	Delayed generalized urticaria
157	2022-2106-049	Moderna 3rd	Delayed generalized urticaria
158	2022-2106-050	Moderna 3rd	Delayed generalized urticaria erythema pruritus
159	2022-2106-051	Moderna 3rd	Delayed generalized urticaria
160	2022-3593-001	Pfizer Comirnaty 3 rd (1 st and 2 nd Moderna)	Myelitis/transverse myelitis
161	2022-4869-006	Moderna 3rd	Delayed generalized erythema pruritus rash
162	2022-4869-007	Moderna 3rd	Delayed generalized pruritus
163	2022-4869-008	Moderna 2nd	Delayed generalized pruritus rash
164	2022-4896-009	Moderna 2 nd	2021 N/V & facial rash
165	2022-4869-010	Moderna 3 rd	Dystonia post vaccine administration
166	2022-3578-030	Modern 3rd	Delayed generalized Urticaria pruritus
167	2022-3578-031	Moderna 3 rd	Delayed generalized urticaria
168	2020-3578-032	Moderna 3 rd	Delayed generalized erythema pruritus rash
169	2022-3578-033	Moderna 3 rd	Delayed generalized erythema pruritus rash
170	2022-3578-034	Moderna 2nd	Perimyocarditis
171	2022-3578-035	Moderna 3rd	Localized urticarial pruritus
172	2022-3544-024	Moderna 3 rd	Delayed generalized rash
173	2022-3577-006	Moderna 3 rd	Delayed generalized pruritus rash
174	2022-3577-007	Moderna 3 rd	Delayed generalized pruritus rash
175	2022-3544-025	Moderna 3rd	Delayed generalized pruritus rash
176	2022-3544-026	Moderna 3 rd	Delayed generalized pruritus rash
177	2022-3544-027	Moderna 3 rd	Delayed generalized pruritus rash
178	2022-2106-052	Moderna 3 rd	Delayed generalized erythema pruritus

	Unique Identifier # (Year/Unit Identification Number (UIC)/Report Sequence Number)	Vaccines	Adverse Event
179	2020-3950-001	Moderna 3 rd	Delayed localized Urticaria
180	2022-3801-001	Moderna 3 rd	Delayed generalized Urticaria
181	2022-3801-002	Moderna 3 rd	Delayed generalized Urticaria
182	2022-3801-003	Moderna 3 rd	Delayed generalized Urticaria
183	2021-3962-001	Moderna 1 st	Pericarditis
184	2022-3801-004	Moderna 3 rd	Delayed generalized Urticaria
185	2022-4869-011	Moderna 2 nd	Localized urticaria and tremors
186	2022-3589-030	Moderna 3 rd	Delayed onset Left shoulder pain
187	2022-3544-028	Moderna 3 rd	Delayed generalized urticaria
188	2022-3544-029	Moderna 3 rd	Localized swelling and nodule
189	2022-3544-030	Moderna 3 rd	Delayed localized urticaria
190	2022-2106-053	Moderna 3 rd	Delayed urticaria
191	2022-2106-054	Moderna 3 rd	Delayed generalized urticaria
192	2022-3589-029	Moderna 3 rd	Delayed generalized urticaria, pruritus rash
193	2022-2104-001	Flulaval/Menactra	Generalized urticaria pruritus (note Moderna 3 rd given prior)
194	2022-2104-002	Flulaval	Generalized urticaria pruritus (note Moderna 3 rd given prior)
195	2022-2104-003	Flulaval	Generalized urticaria pruritus (note Moderna 3 rd given prior)
196	2022-2104-004	Flulaval	Generalized urticaria pruritus (note Moderna 3 rd given prior)
197	2022-2104-005	Flulaval	Generalized urticaria pruritus (note Moderna 3 rd given prior)
198	2022-2104-006	Imuvax(Polio)	Generalized urticaria pruritus (note Moderna 3 rd given prior)
199	2022-2104-007	Flulaval/Menactra	Generalized urticaria pruritus (note Moderna 3 rd given prior)
200	2022-2104-008	Moderna 3 rd	Delayed generalized erythema pruritus rash
201	2022-2106-055	Moderna 3 rd	Delayed onset Cutaneous eruption
202	2022-3586-002	Pfizer 3 rd	Localized induration, erythema, lymphedema
203	2022-3568-001	Moderna 3 rd	Delayed Generalized urticarial, erythema
204	2022-4869-012	Pfizer 3 rd	Delayed erythema, pruritus
205	2022-4869-013	Moderna 3 rd	Delayed urticaria, pruritus
206	2022-4869-014	Pfizer 2 nd	Delayed onset chest tightness
207	2021-3967-001*	Pfizer 1 st	Left shoulder pain (* = same patient/red = not submitted to PHAC)

	Unique Identifier # (Year/Unit Identification Number (UIC)/Report Sequence Number)	Vaccines	Adverse Event
208	2021-3967-002*	Pfizer 1st	Local swelling, pain
209	2021-3967-003*	Pfizer 1st	Delayed chest tightness
210	2021-3967-004*	Pfizer 1st	Delayed paresthesia
211	2021-3967-005*	Pfizer 1st	Delayed chest tightness
212	2022-3584-003	Pfizer 1st	Delayed chest tightness and SOB
213	2022-3692-002	Moderna (3 rd dose)	Anaphylaxis
214	2022-3584-004	Pfizer 4th	Undiluted dose administered
215	2022-3956-001	TBE	Vision loss (rescinded)
216	2022-3544-031	Moderna 3 rd /Hep A/ Hep B	Delayed generalized urticaria
217	2022-6399-001	Menactra	Delayed generalized urticaria
218	2022-4869-015	Moderna 3 rd	Delayed generalized Urticaria, Pruritus
219	2022-6448-003	Typhim	Lt arm/hand Paresthesia
220	2022-3584-005	Modern 4 th	GI
221	2022-3577-008	Ixiaro (JEV) 1 st	Facial numbness
222	2022-80587-001	TBEV 2nd	Syncopy episode
223	2022-3584-006	Moderna (3 rd dose)	Diarrhea
2023			
001	2023-4869-016	Moderna (3 rd dose)	Alopecia areata
002	2023-3582-001	Shingrix	Local reaction, itchy, axilla sore, sore throat, watery itchy eyes
003	2023-2104-001	Td Adsorbed	SIRVA
004	2023-3801-001	Moderna 2nd	Lymphadenitis, sarcoidosis
005	2023-2104-002	Menactra Tico-Vac Moderna Bivalent BA1 (3 rd dose)	Seizure
006	2023-3577-001	Moderna (2 nd dose)	Pruritus
007	2023-3577-002	Moderna (3 rd dose)	Erythema, pruritus, hives, rash
008	2023-6399-001	Moderna Bivalent BA4/5 (4 th dose) Td Menactra	Rash, urticaria
009	2023-3577-003	Moderna Bivalent BA1	Urticaria
010	2023-3956-001	Moderna (3 rd dose0	Generalized urticaria

	Unique Identifier # (Year/Unit Identification Number (UIC)/Report Sequence Number)	Vaccines	Adverse Event
011	2023-3956-002	Moderna Bivalent BA1 (4 th dose) & Flu Laval Tetra	Generalized urticaria

Source: Reported AEFI's to DFHP from 2010-2023 (Y:\1-CFHS-SSFC\1-FHP\6635-Communicable Disease Control\6635-22- Adverse Events Following Immunization).



Medical Disposition in the CAF 2017-2018: An Analyses of Sick Leave, Excused Duty, and Duty Restrictions Using CF-HERO Surveillance Data

Kiyuri Naicker, PhD. & Robert Hawes, PhD (Can) • Directorate of Force Health Protection, Canadian Forces Health Services Group, Department of National Defence, Ottawa, Ontario

BACKGROUND

- The effective strength of the Canadian Armed Forces (CAF) is directly impacted by the medical disposition status of CAF personnel. Personnel may temporarily be excused from duty for medical reasons (ED: 1 to 2 days), granted sick leave (SL: 1 to 183+ days), or returned to duty with medical limitations (RDL: unlimited duration). An accurate tracking of medical disposition status and the long-term outcomes of medical absences could provide crucial data regarding the health and ongoing operational readiness of the CAF.
- Medical disposition data is routinely collected by the Canadian Forces Health, Evaluation and Reporting Outcomes System (CF-HERO). However, this data presents certain analytical challenges. Within this system, data from the CFHIS electronic medical record is collected and merged with Blue Cross Health Insurance Claims, Oracle/HRMS data, and other organizational data feeds on a weekly basis. The average personnel lifecycle comprises a variety of occupational and health changes, generating hundreds or thousands of records per individual all linked over time. Advanced skills in data curation, data cleaning and manipulation, and statistical programming are therefore requisite to working with this data.
- Specific to medical disposition data, the issuance of multiple continuous or overlapping disposition periods is a frequent occurrence, which may impact frequency estimates. Tallying individual disposition "chits" without accounting for this overlap may overestimate the number of medical disposition periods and underestimate each period duration.
- Due to the challenges outlined above, an accurate calculation of the number of days that personnel are absent from work or restricted due to medical causes has not been undertaken to date. This study endeavoured to address these challenges and provides next steps for leveraging electronic health records to generate operationally relevant data.

PURPOSE AND OBJECTIVES

- To describe the frequency of medical dispositions (i.e., sick leave, excused duty, and duty restrictions) issued to CAF personnel in 2017 and 2018 using electronic health data.
- To determine the impact of overlapping medical disposition periods and prescribing practices on these estimates.



METHODS

Participants and Data Source

Study Sample:

This analysis includes all CAF Regular Force personnel who were currently enlisted between January 1, 2017 and December 31, 2018. All sick leave, excused duty, and restricted duty dispositions issued to Regular Force members over a 2-year period (2017/18) were analysed.

Data Capture by the CF-HERO Surveillance System:

Medical disposition data was extracted from the CFHIS record, and linked to medical category and denominator data from the Canadian Forces Health, Evaluations and Reporting Outcomes (CF-HERO) surveillance system. All medical dispositions were linked by service number within an individual.

Denominator data was extracted from the Master Patient Index database, and defined as the number of active Regular Force members on January 1st of each year. A total of 65,925 members were included in the study sample in 2017, and 66,535 members were included in 2018.



Analysis

- Descriptive statistics were calculated using STATA 14.0 and Excel 2013.
- Medical disposition start and end dates were used to calculate the total length of each disposition period. Chits with overlapping dates or those that were issued <2 days apart were analyzed as one continuous disposition period. All disposition days were counted within the year they occurred (regardless of the date of issuance).

Results

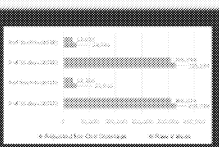
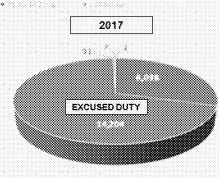
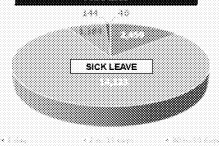


FIGURE 1: Total number of sick leave disposition days in 2017, adjusted for overlapping periods.

- A total of 18,156 sick leave dispositions were issued to CAF personnel in 2017 (a total of 12,658 individuals received SL).
- A total of 17,697 sick leave dispositions were issued to CAF personnel in 2018 (a total of 12,388 individuals received SL).
- A total of 36,143 excused duty dispositions were issued to CAF personnel in 2017; a further 37,389 were issued in 2018.
- A total of 1.9 million days of restricted duty (RDL) were issued to CAF personnel in 2017, and 2.1 million in 2018.
- Overall, CAF personnel were absent from work for medical reasons (due to either SL or ED) for a total of 267,594 days in 2017, and 272,865 in 2018.

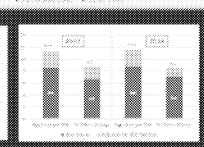
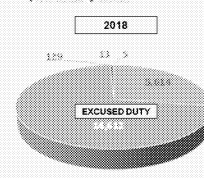


FIGURE 2: Total number of excused duty disposition days in 2018, adjusted for overlapping periods.

Adjusting for overlapping dispositions leads to a decrease in number of chits and an increase in medical disposition length.

In addition, the average disposition length increased by roughly 3 days when accounting for overlaps in chits.

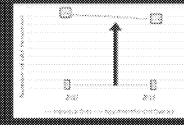


FIGURE 3: CAF Personnel with >30 days of continuous sick leave, adjusted for overlap.

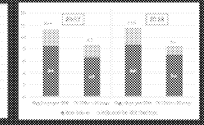


FIGURE 4: Average sick leave length, adjusted for overlapping periods.

KEY FINDINGS

SICK LEAVE: Over 200,000 days of sick leave were granted in 2017 and 2018, respectively. Approximately 12,500 CAF members each year received a SL chit. A slight decrease was observed in the number issued from 2017 to 2018. The average length of a SL disposition was roughly 11 days. Importantly, adjusting for overlaps and gaps in dispositions increased detection of sick leave periods >91 days from 8 members to over 170 members per year.

EXCUSED DUTY: Over 60,000 excused duty days were granted each year. A slight increase was observed in the number of ED days issued from 2017 to 2018. The average length of an ED disposition was 1.7 days (substantially shorter than SL). However, between 100 and 150 CAF members each year were assigned an ED disposition >30 days in duration. Of these, eighteen members had >91 continuous days of excused duty granted in 2018.

DUTY RESTRICTIONS: A large number of medical duty restrictions were granted each year (~ 2 million days). However, many of these do not represent serious employment limitations (e.g., beard chits). The impact of an RDL status on service is therefore MOSID specific.

NEXT STEPS

- To break down SL, ED, and RDL dispositions issued by age group, sex, command, and base.
- To combine overlapping ED and SL periods in order to refine the length of absence from work for any given medical condition.
- Linkage of medical employment limitations to MOSID identifiers. This would enable categorization of RDL limitations as having mild, moderate, or severe impacts on service within their respective trades.
- Linkage to Medical Category data, in order to examine medical categories (e.g., temporary (TCATs) and permanent (PCATs) categories) associated with SL and ED prescriptions. This would allow an investigation of long-term trends in medical disposition outcomes and the identification of relevant risk factors for medical category assignments.

CONCLUSIONS

- Overall, CAF Reg Force personnel are absent from work due to medical reasons for roughly 4.9 days/person/year (270,000 days total). Of these, a minority of members were granted excused duty for medical reasons for greater durations than expected (i.e., >30 days).
- The use of electronic health data from the Canadian Forces Health Information System (CFHIS) is a viable approach to tracking and analysing disposition status of CAF members. Accounting for chit prescribing practices is essential to generating an accurate count of leave duration. This may support tracking of compliance with the *Queen's Regulations and Orders* governing sick leave and the assignment of medical categories.
- Linkage to further databases within the CF-HERO system could allow a more nuanced analyses of the impact of health status on service, and an exploration of the long-term patterns and risk factors associated with medical category assignments and release.

OFFICE OF THE DEPUTY MINISTER

Canadian Forces Health Services Group

Canadian Armed Forces Health Indicators Report Part 2: Results

Robert Hawes, Francois Theriault, Diane Lu,
& CF-HERO Research Group

Directorate of Force Health Protection
Canadian Forces Health Services Group

MVHR Forum, Regina
14 October 2018

Canada

Results

CAF HI Report: Indicators

- Medical Readiness
- Health Behaviours
- Health Outcomes
- Health Resource Use
- CAF Command Dashboards



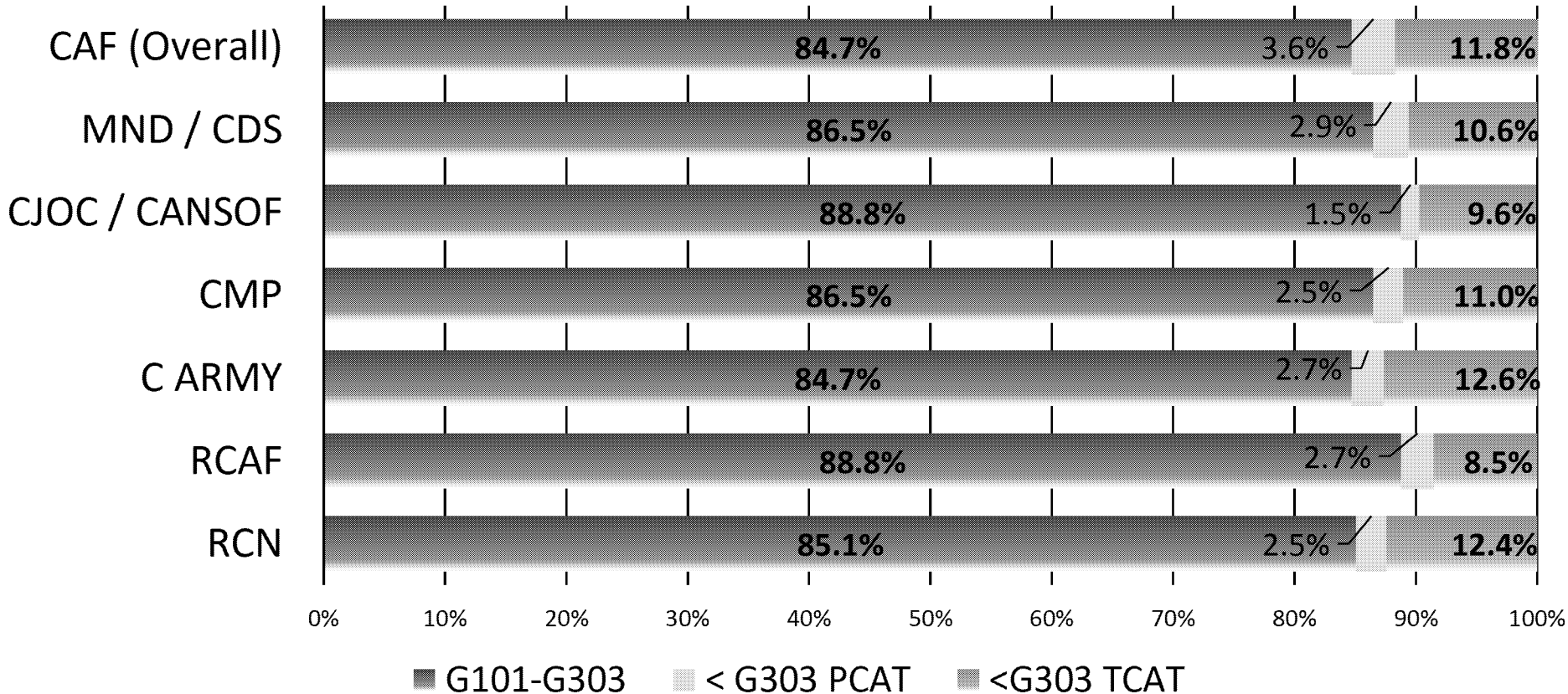


Medical Readiness

*Geographic and Occupational
Medical Categories
Hearing and Vision Categories
OUTCAN Screening
Medical Release
Mortality Rate*

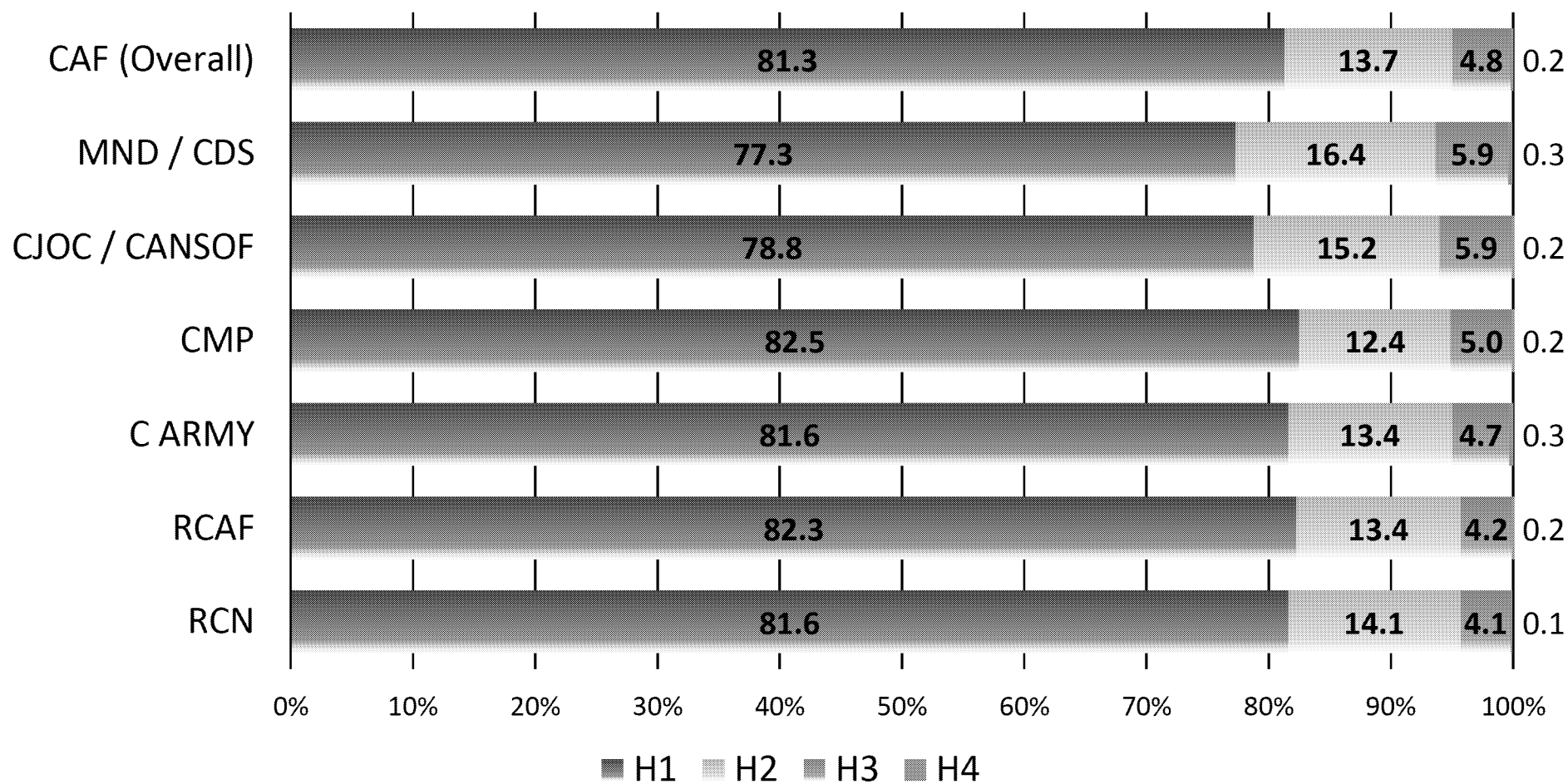
Medical Categories: Geographic and Occupational Factors

Prevalence of Geographic & Occupational Categories by Command,
2017

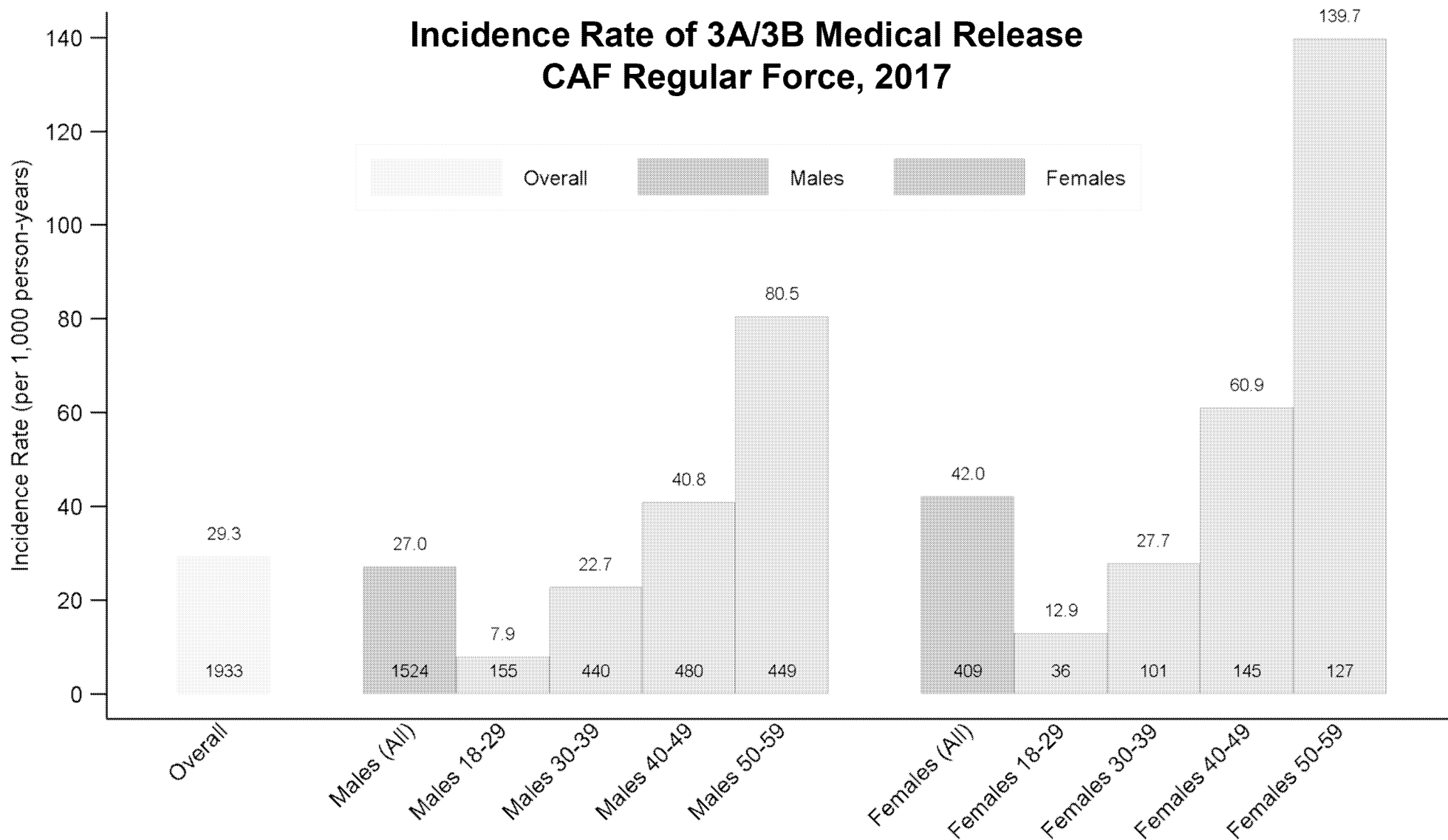


Medical Categories: Hearing

Prevalence of Hearing Categories in Regular Force Personnel by Command



Medical Release

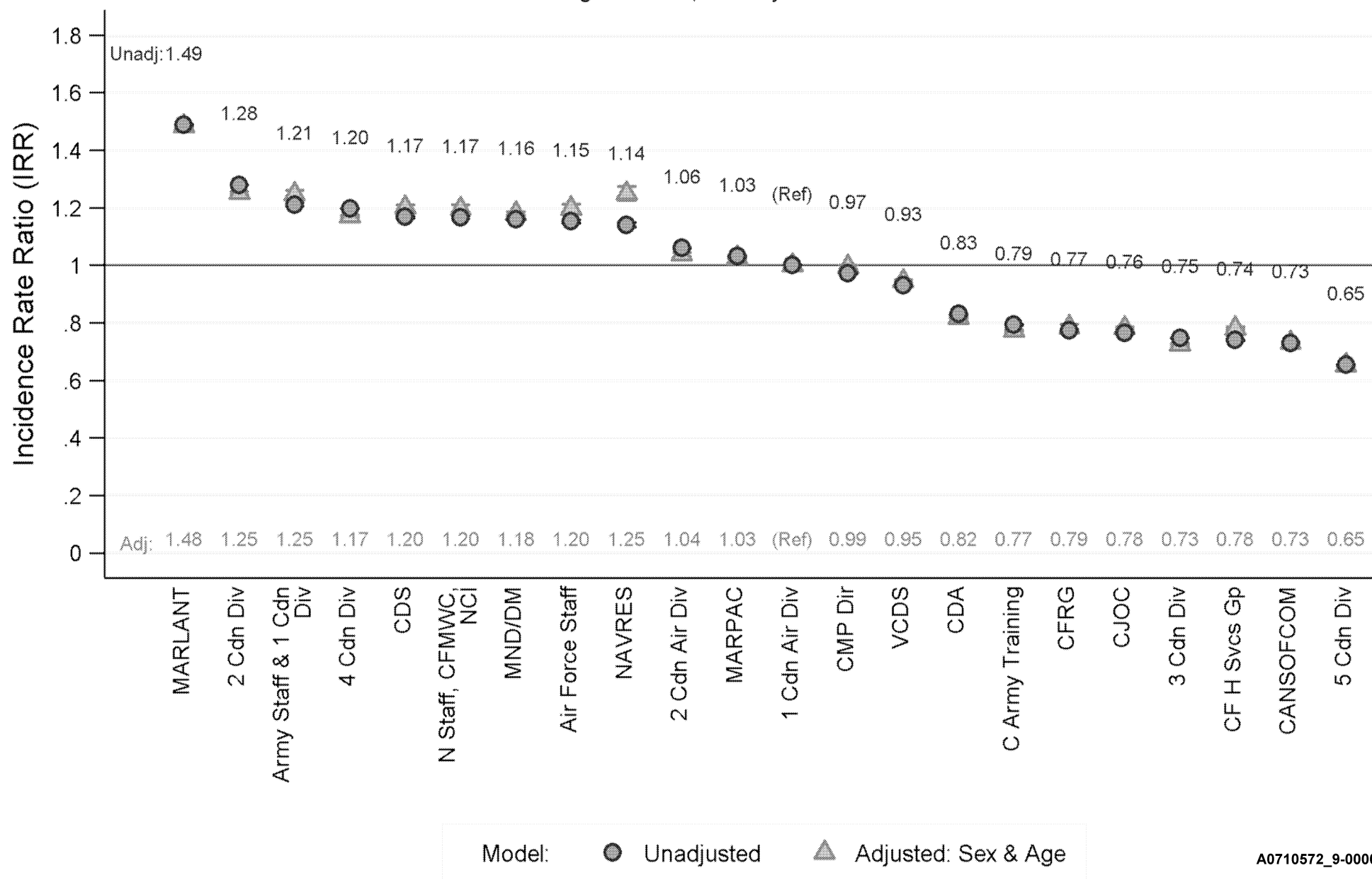


Health Behaviours

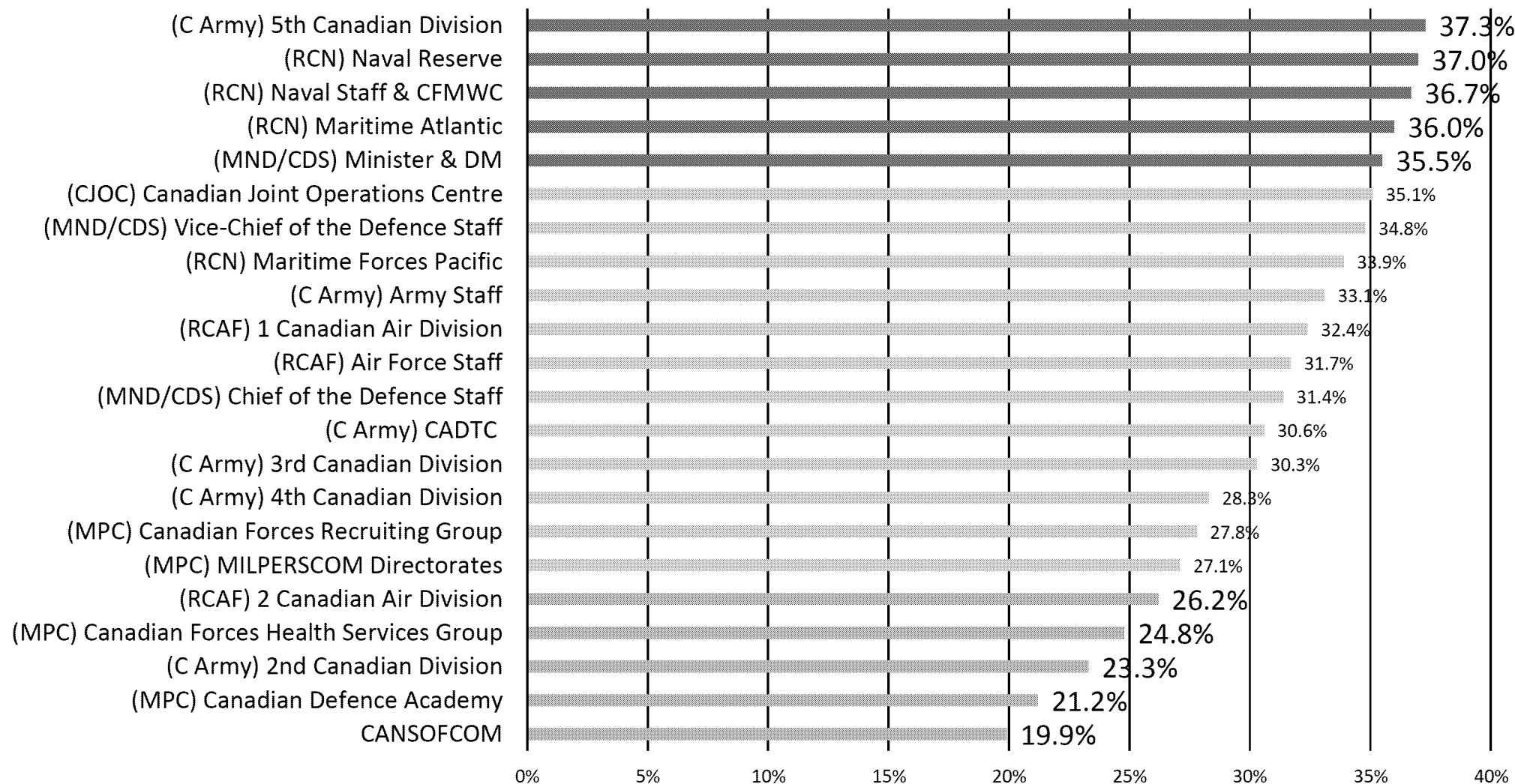
Tobacco Use
Healthy Body Weight
Alcohol Disorders
Dental Caries Risk
Sleep Disorders

Incidence Rate Ratio of Dental Caries Risk: Moderate or High, CAF Organization

CAF Regular Force, January 2017 to December 2017

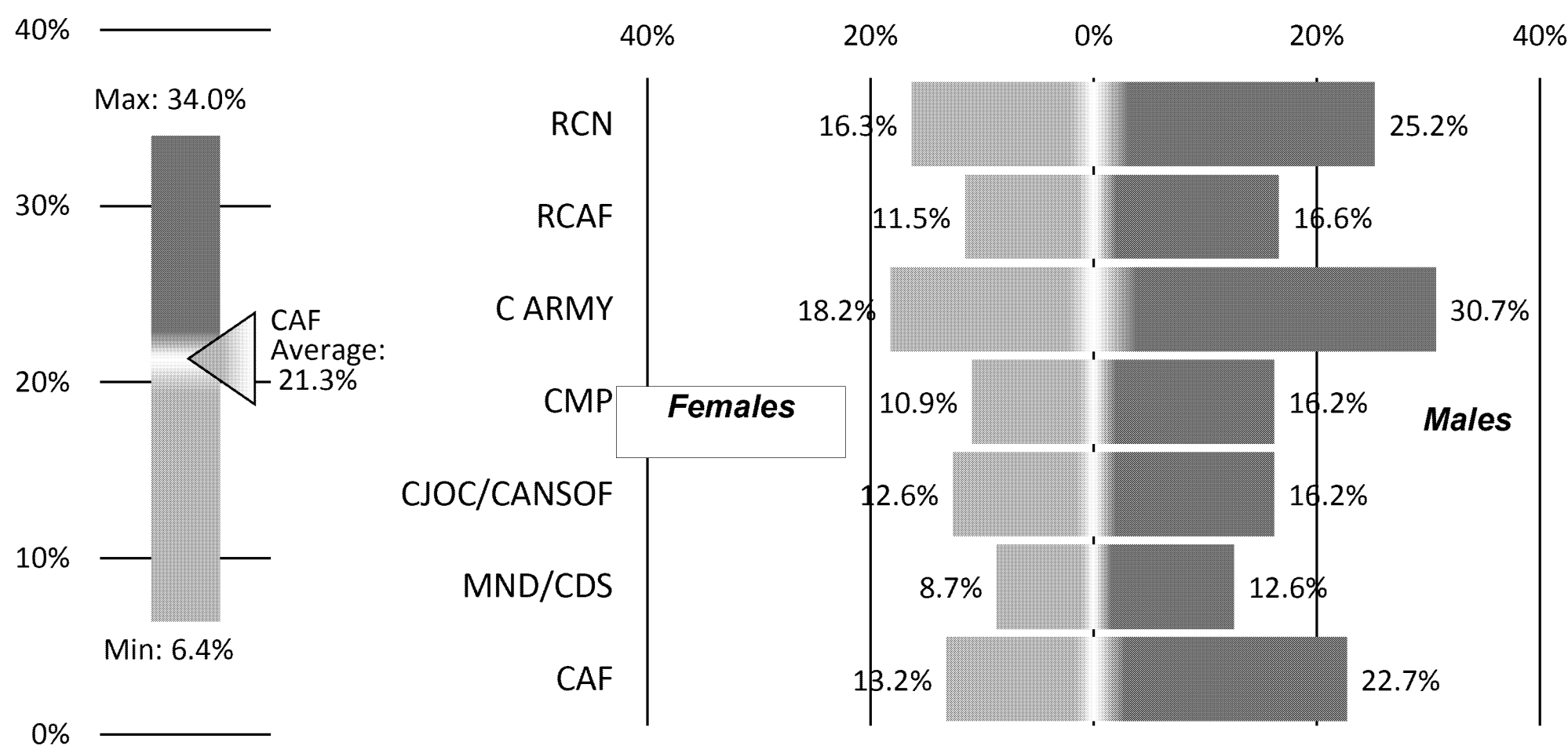


Obesity: Measured BMI ≥ 30



Current Tobacco Use

Current Tobacco Use by CAF Command, 2017

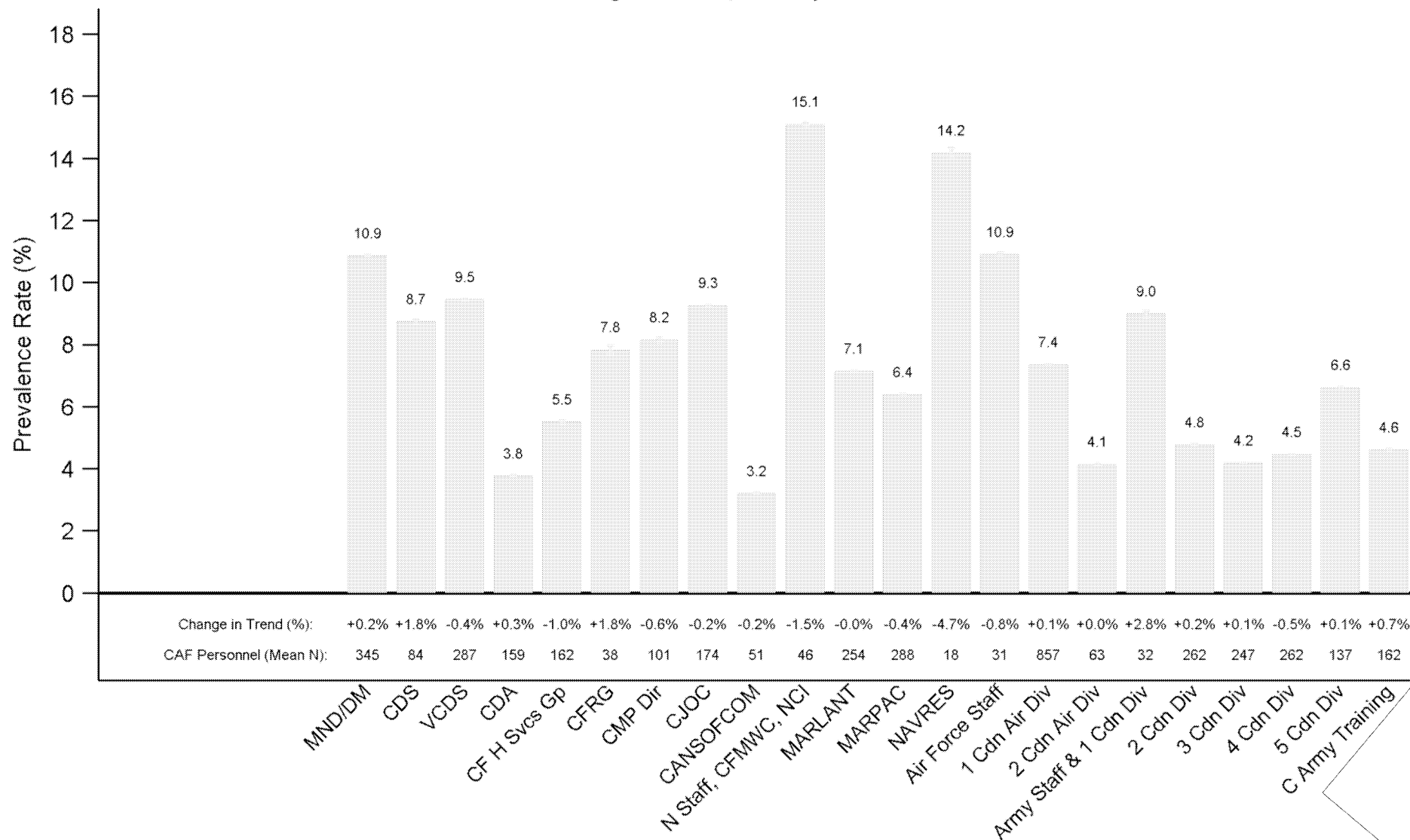




Health Outcomes

Chronic Disease
Mental Health and Addictions
Musculoskeletal Health
Hearing Loss
Acute Injuries

Prevalence Rate of Hypertension: Hypertension, CAF Organization CAF Regular Force, January 2017 to December 2017



Hypertension:



Overall Prevalence



95% Confidence Interval

Carpal Tunnel Syndrome

Background

Carpal Tunnel Syndrome (CTS) is a condition affecting the hand and wrist. It occurs when the median nerve, which runs from the forearm into the palm of the hand, becomes constricted by the tendons of the fingers which surround it. CTS presents as numbness, pain, weakness, and various other problems in the affected hand, which reduces the affected person's fine motor skills and strength in that hand.

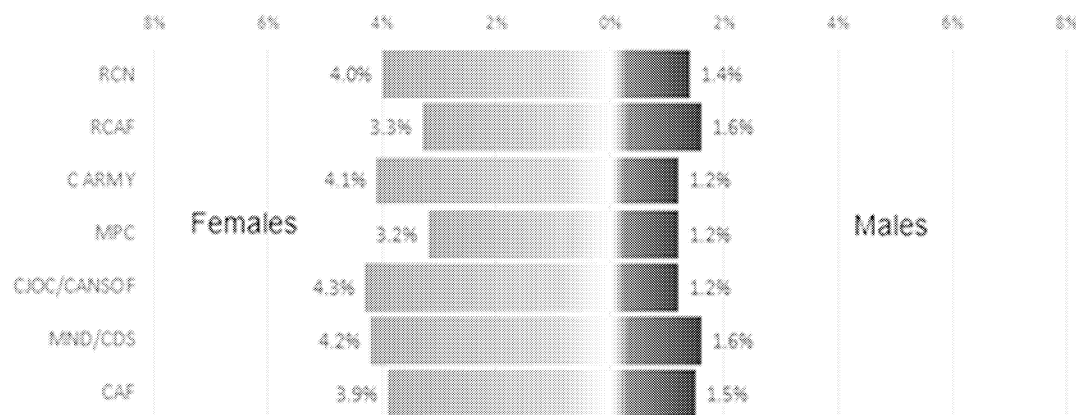
The overall incidence of CTS in the Canadian working age population was 1.03% (103 cases out of 100 000 persons in 66 months), which is lower than both the self-reported HLIS prevalence in CAF Regular Force members of repetitive strain injuries in the hand (3.3%)² and the HERO system's average prevalence in the CAF (1.8%). The HLIS report also indicates a rising trend of CTS in the CAF Regular Force members².

Operational Impact

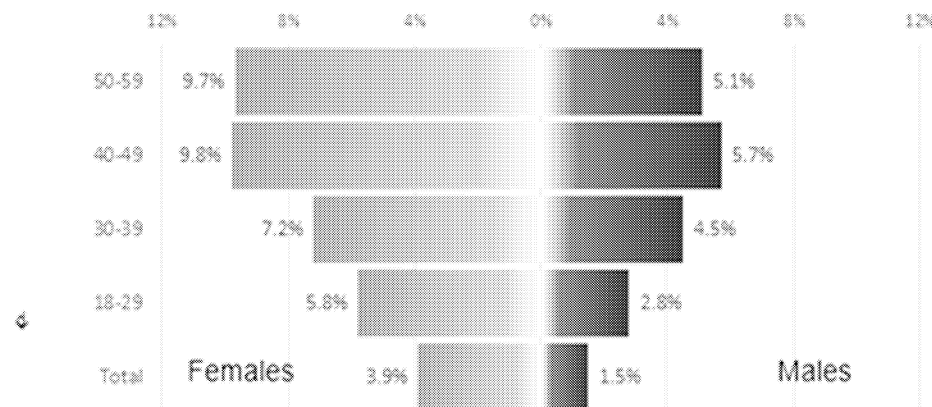
CTS can be aggravated or developed by doing tasks such as moving objects heavier than 3kg with the affected hand for a substantial part of the day (2hrs+ per day), high repetition activities or vibration for a substantial part of the day². Overall, CTS impedes a soldier's effectiveness in the workplace dramatically by reducing the time they are able to work and with what dexterity they possess. Splints and stretches may reduce the symptoms somewhat, but often the affected person must either seek out a way to reduce hand strain or an invasive treatment to the condition, such as corticosteroid injections or surgery¹.

- ❖ CAF Regular Force personnel in the Canadian Army have the lowest rates of Carpal Tunnel Syndrome; Minister of National Defence & Chief of the Defence Staff have the highest

Prevalence of Cby CAF Command, Males and Females, 2017



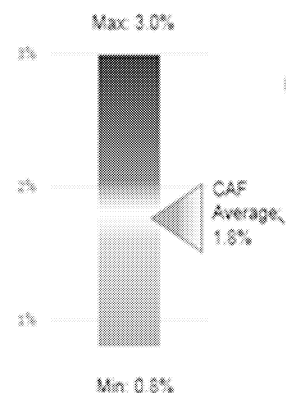
Prevalence of Carpal Tunnel Syndrome by Age Group, Males and Females, 2017



- ❖ Females are 2.6 times more likely than males to develop Carpal Tunnel Syndrome

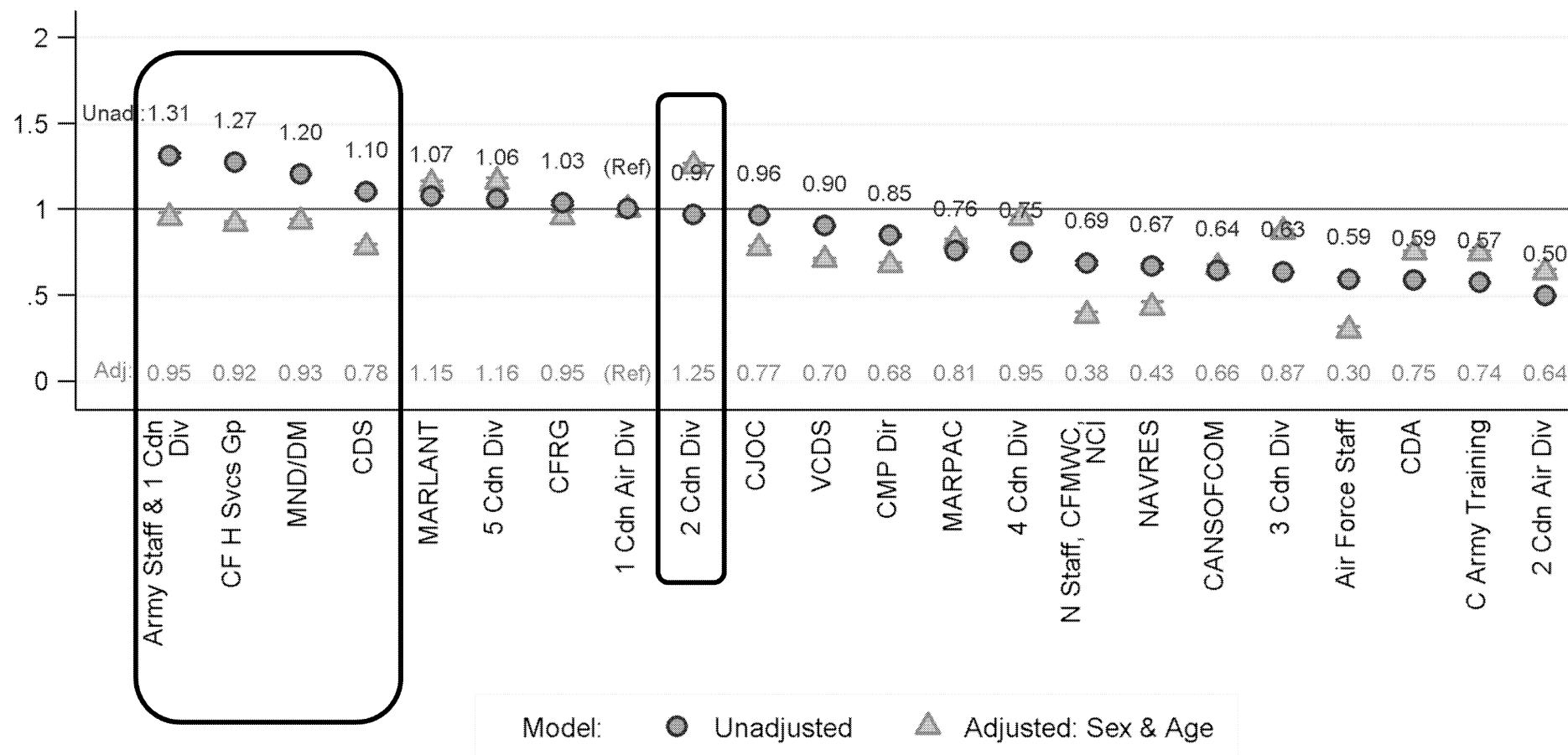
- ❖ 1.8% of CAF Regular Force personnel have Carpal Tunnel Syndrome

Prevalence of Carpal Tunnel Syndrome, Mean and Range, 2017



Incidence Rate Ratio of Carpal Tunnel Syndrome: Positive, CAF Organization

CAF Regular Force, January 2017 to December 2017



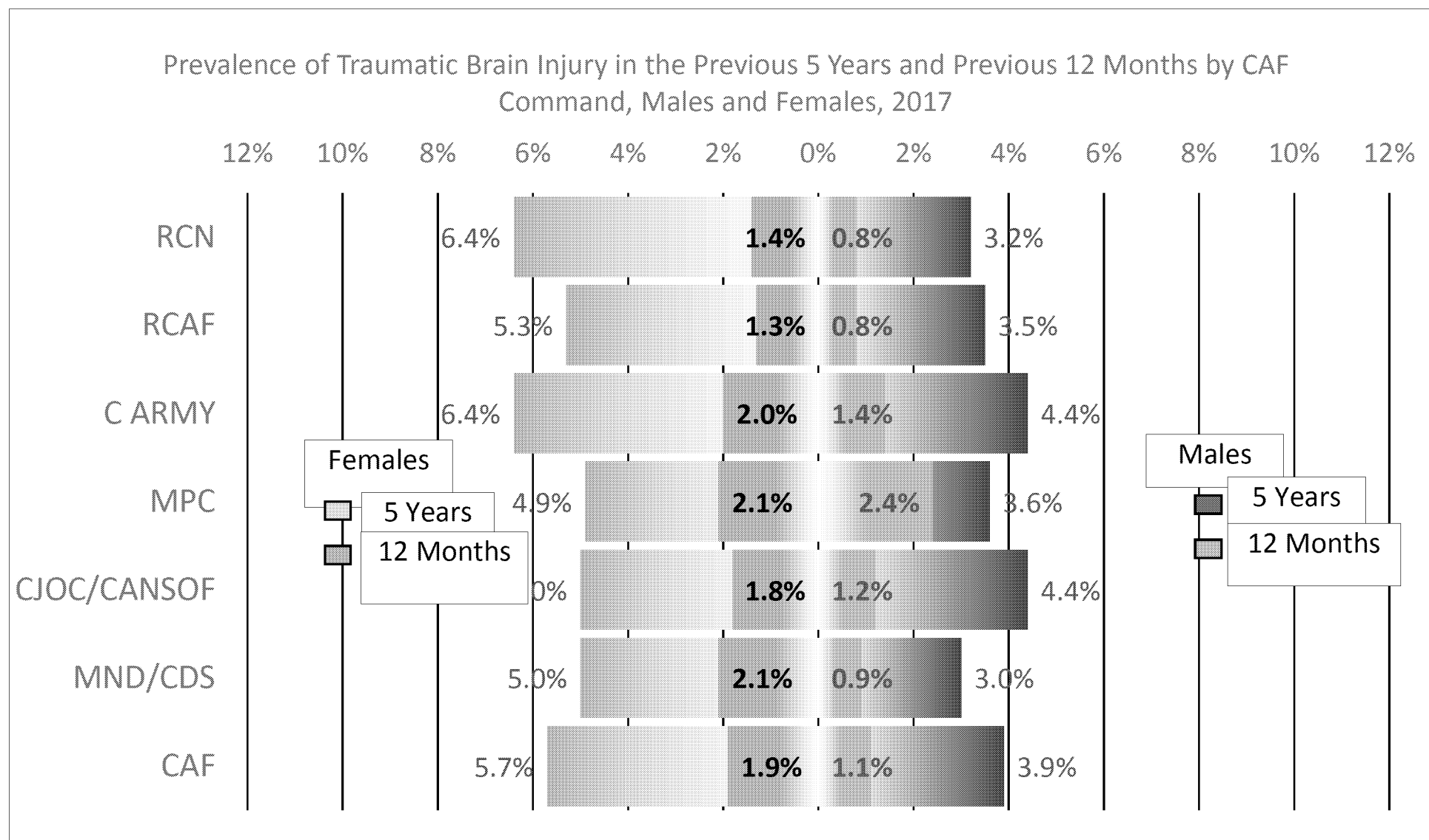
Source: Hawes RA & Theriault FL (2018) Directorate Force Health Protection, CF Health Services Group
Canadian Forces Health, Evaluations and Reporting Outcomes (CF-HERO) System, January 2017 to December 2017

Results obtained using robust Poisson regression, with log of population specified as an offset in all models

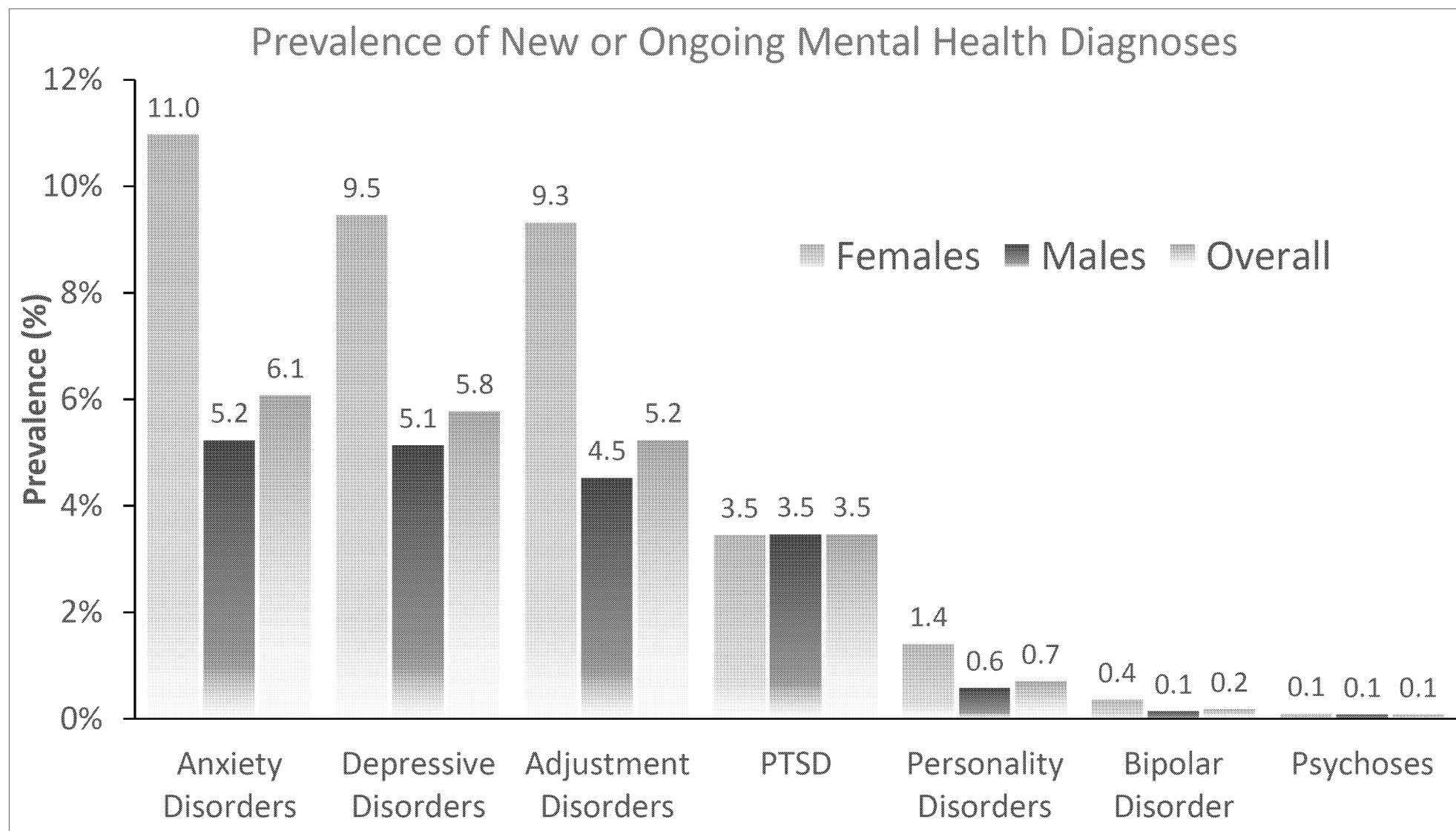
Incidence Rate Ratios (IRR) for Sex: Ref = Females; Males = 0.40 (95% CI: 0.40-0.41)

Incidence Rate Ratio (IRR) for Age Groups: Ref = 18-29; 30-39 = 3.25 (95% CI: 3.22-3.29); 40-49 = 5.60 (95% CI: 5.55-5.66); 50-59 = 7.09 (95% CI: 7.01-7.16)

Traumatic Brain Injury



Mental Health



Note: Diagnoses based on ICD-10 diagnoses from CFHIS Primary Care Notes and DSM-5 diagnoses from CFHIS MH Notes
A0710572_17-000036

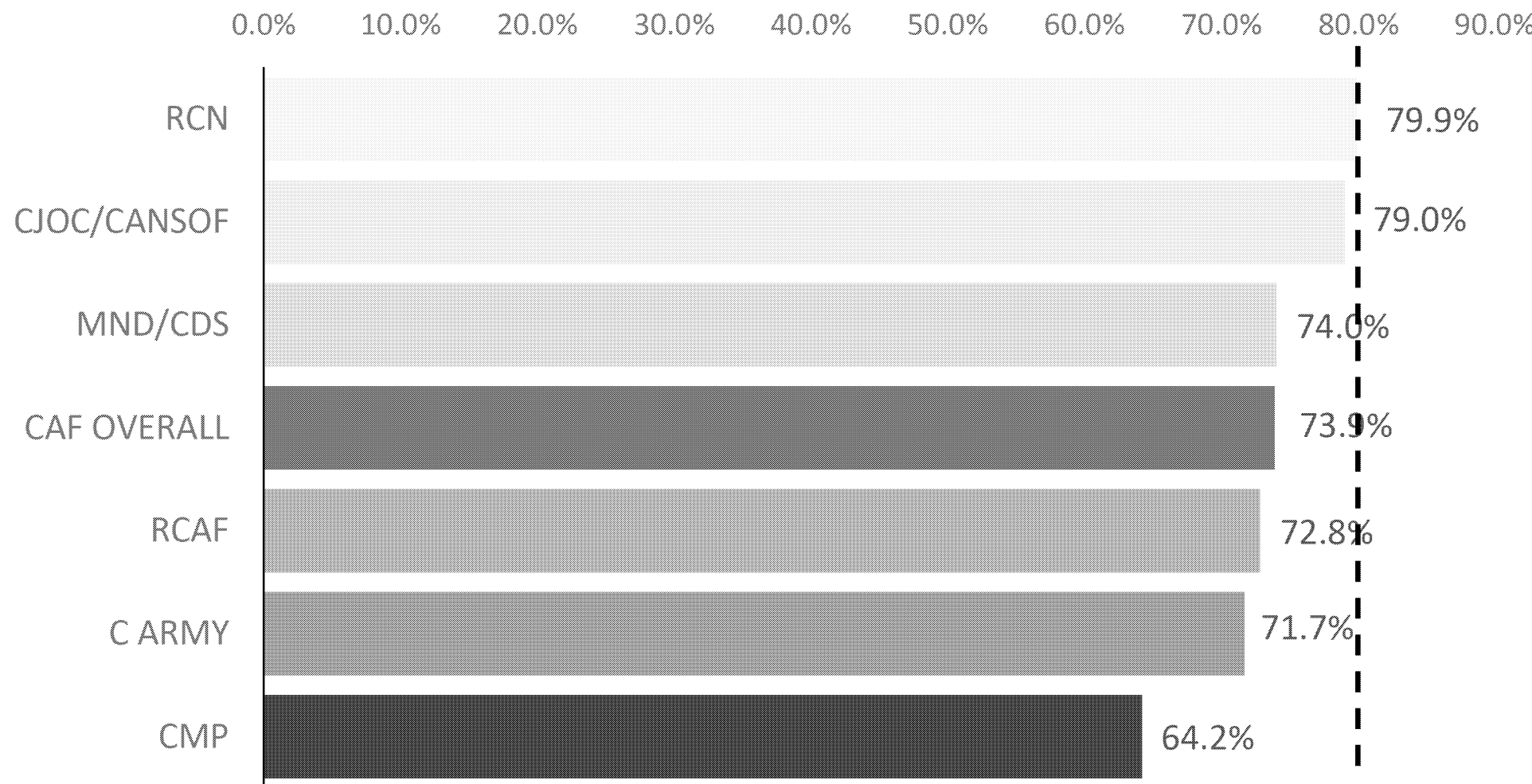


Health Resource Use

Primary Care Visits
Referrals to Specialty Care
Emergency Room Visits
Hospitalizations
Diagnostic Imaging Use
Physiotherapy
Chiropractor & Acupuncture
Case Management

Cervical Cancer Screening

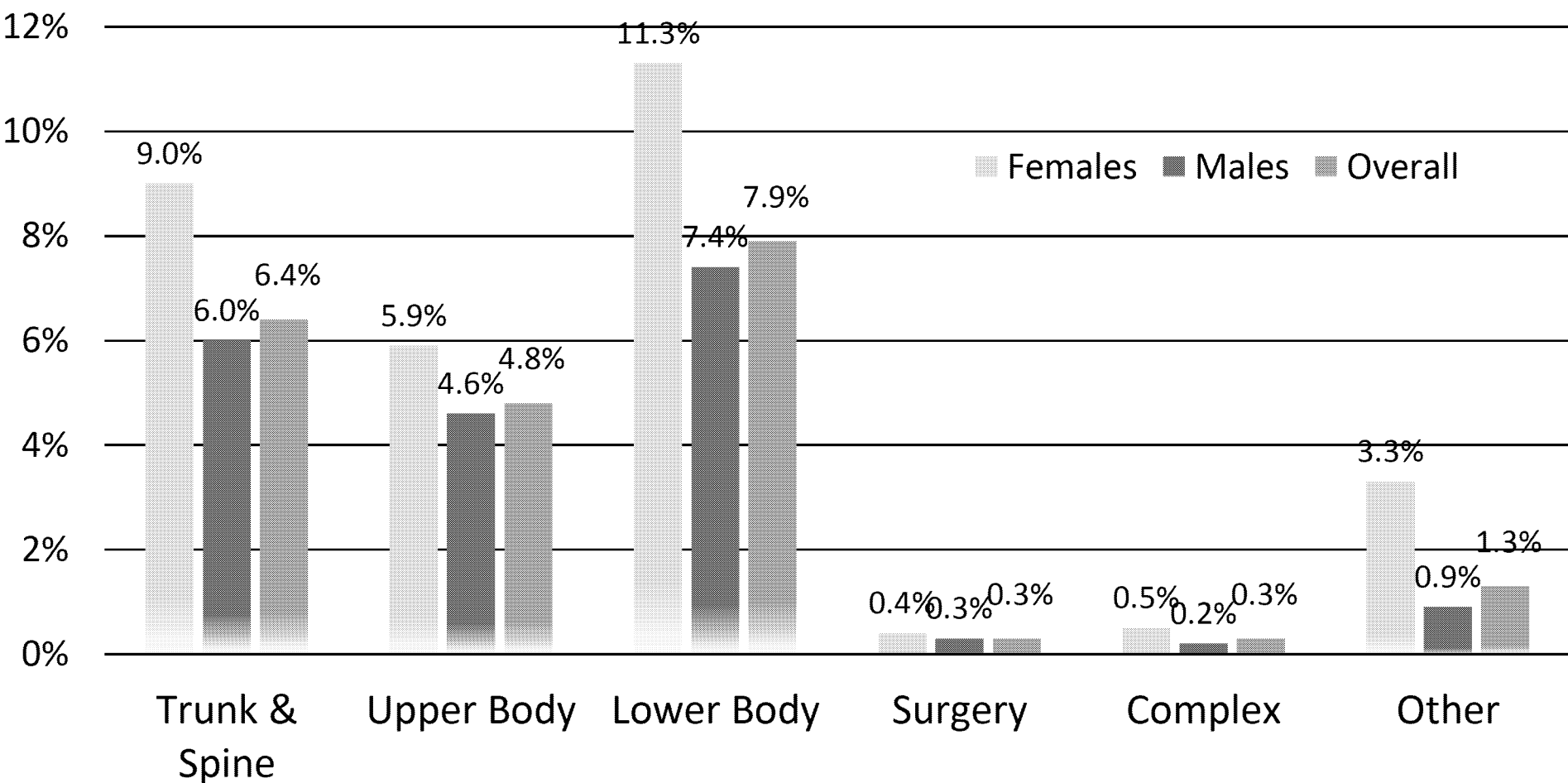
Papanicolaou Test Rates by CAF Command



Screening Target: 80%
A0710572_19-000038

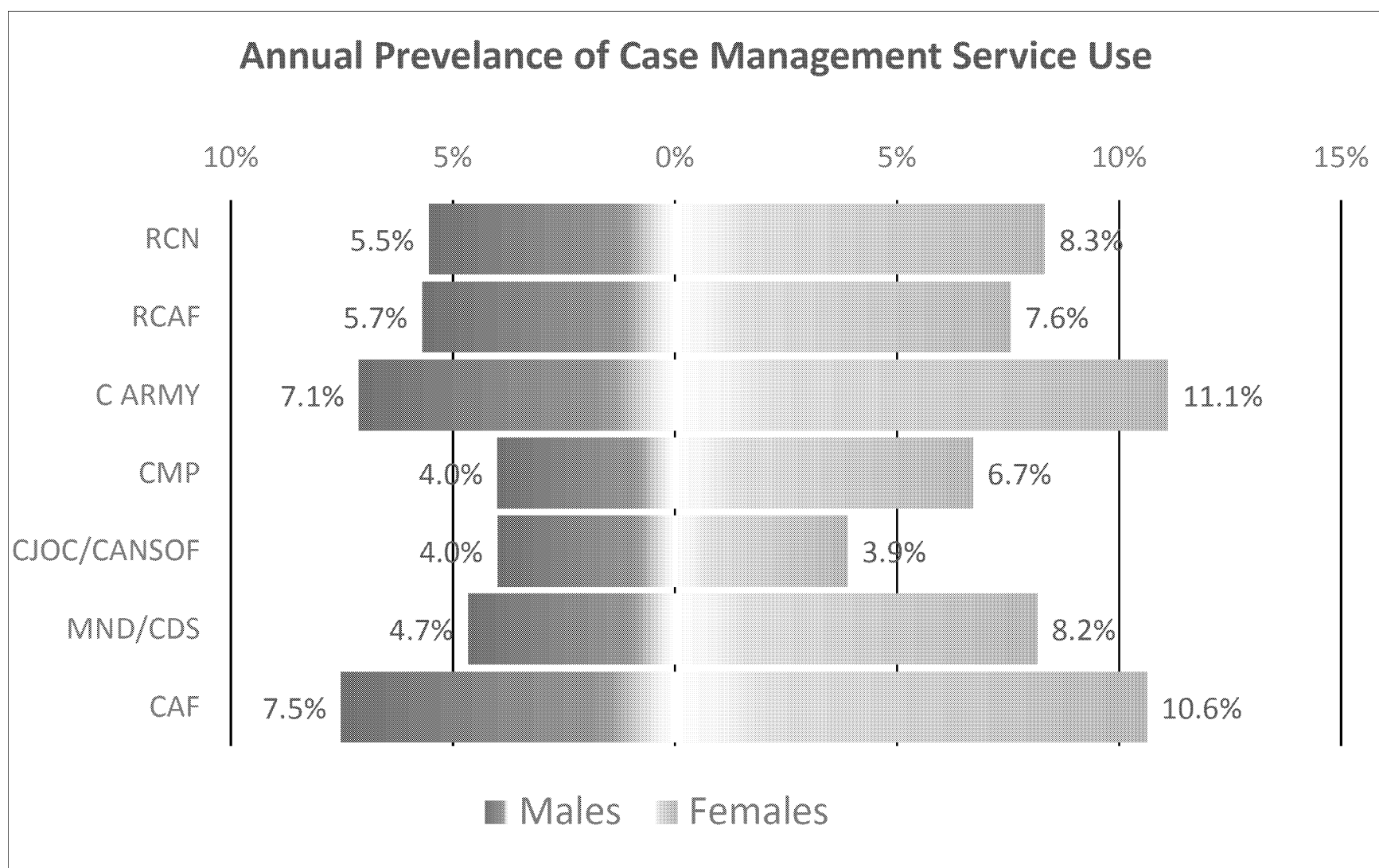
Physiotherapy Referrals

Prevalence of Physiotherapy Referrals, 2017



<i>Prevalence of Physiotherapy Referrals, 2017</i>	Trunk & Spine	Upper Body	Lower Body	Notes
CAF Overall	6.4%	4.8%	7.9%	
Minister of Nat. Defence & Chief of the Defence Staff (MND/CDS)	5.9%	4.4%	6.6%	
Military Personnel Command (MPC)	5.4%	4.0%	7.7%	
Royal Canadian Navy (RCN)	5.6%	4.8%	6.8%	
Royal Canadian Air Force (RCAF)	6.7%	5.2%	7.4%	
Canadian Army (C Army)	6.7%	4.6%	9.0%	
Canadian Joint and Special Forces (CJOC/CANSOFCOM)	7.3%	6.0%	8.2%	
<i>Organizational Subgroups</i>				
(MND/CDS) Minister and Deputy Minister of National Defence	6.5%	4.8%	7.0%	
(CDS) Chief of the Defence Staff	7.2%	4.9%	8.6%	
(CDS) Vice Chief of the Defence Staff	4.8%	3.8%	5.6%	
(MPC) Canadian Defence Academy	4.6%	3.5%	7.7%	
(MPC) Canadian Forces Health Services Group	7.5%	5.1%	8.6%	
(MPC) Canadian Forces Recruiting Group	4.3%	3.0%	5.9%	
(MPC) Military Personnel Command Directorates	4.1%	3.4%	6.1%	
(RCN) Naval Staff & CFMWC	7.7%	5.3%	8.6%	
(RCN) Maritime Forces Atlantic	5.1%	4.8%	6.7%	
(RCN) Maritime Forces Pacific	5.7%	4.9%	6.6%	
(RCN) Naval Reserve	8.0%	3.8%	7.9%	
(RCAF) Air Force Staff	6.1%	7.1%	5.9%	
(RCAF) 1 Canadian Air Division	6.9%	5.3%	7.4%	
(RCAF) 2 Canadian Air Division	5.3%	4.1%	7.4%	
(C Army) Army Staff	4.4%	5.5%	6.2%	
(C Army) 2nd Canadian Division	9.2%	4.6%	9.7%	
(C Army) 3rd Canadian Division	4.8%	4.5%	8.2%	
(C Army) 4th Canadian Division	6.1%	4.3%	8.2%	
(C Army) 5th Canadian Division	7.7%	5.2%	10.1%	
(C Army) CADTC	6.5%	4.6%	10.4%	
(CJOC) Canadian Joint Operations Command	7.0%	5.0%	8.9%	
(CANSOFCOM) Canadian Special Operations Forces Command	7.8%	7.2%	7.4%	

Case Management





Royal Canadian Navy

*Naval Staff, CFMWC, NCI
Maritime Forces Atlantic
Maritime Forces Pacific
Naval Reserves*

Royal Canadian Navy

The Royal Canadian Navy is a versatile, multipurpose and combat-capable force that protects our interests by safeguarding our maritime approaches, exercising sovereignty over our waters, protecting our offshore natural resources and contributing to global security.

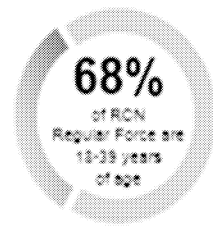
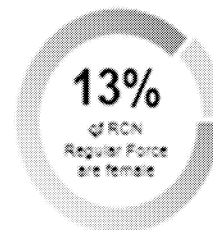
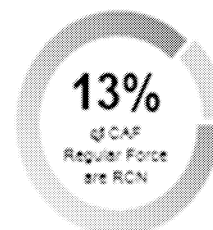
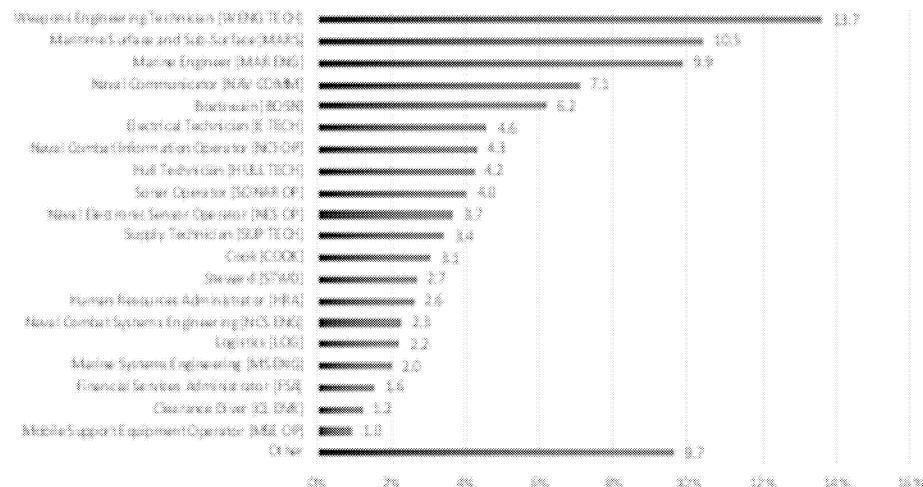
The ships of the fleet can deploy in a number of roles, as a uniquely Canadian response to a domestic or international need, or as part of a larger multinational deployment. Deployments can involve the insertion of one ship into a multinational force, or a large essentially self-sufficient task group of complementary ships, submarines and aircraft.

The navy has both domestic and international roles. At home, maritime defence and security is the navy's first priority in ensuring that Canada's maritime approaches are effectively monitored and protected. Canada also needs naval forces with the ability to act internationally – whenever and wherever issues arise that threaten our national interests.

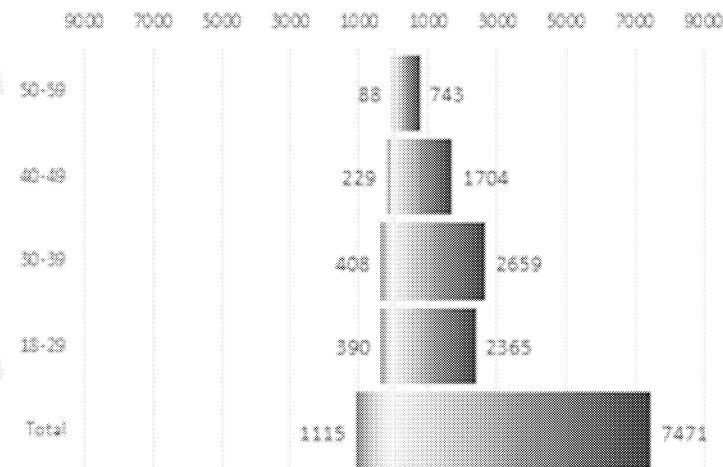
Source: <http://www.forces.gc.ca/en/about-our-structure/royal-canadian-navy.page>



Royal Canadian Navy Occupations, 2017



RCN Population, 2017



Next Steps & Discussion

CAF HI Report: Next Steps

- Finalize the CAF Command and Organization dashboards
- Chain of Command review
- Translation
- Communication Strategy
- Dissemination



CAF HI Report: Discussion

Which CAF Health Indicators....

- ...would be most useful in YOUR work?
- ...would support health promotion?
- ...need to be improved or nuanced for maximum effectiveness?
- ...would you need more (or less) often?



Thank You ~ Merci

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Canadian Forces Health Services Group
Directorate Force Health Protection

Acknowledgements

CF-HERO / DFHP Team

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CFHIS/DEIMS





National
Défence

Défense
nationale

CHIEF OF MILITARY PERSONNEL
CANADIAN FORCES HEALTH SERVICES



COMMANDEMENT DU PERSONNEL MILITAIRE
SERVICES DE SANTÉ DES FORCES CANADIENNES

Canada

CASE MANAGEMENT IN THE CANADIAN ARMED FORCES

Epidemiological surveillance of a national program

François L Thériault, MSc; Anna Bottiglia, BScN; Elaine Somers, BScN; Christine Besnard, BScN

WHAT IS CASE MANAGEMENT?

- Nurse-led collaborative process that involves ongoing evaluation of patient needs, development of individualized care plan, and coordination of care between different providers ¹⁻²
- In other populations, shown to improve patient satisfaction, optimize access to health services, facilitate collaboration between health professionals, and decrease health systems costs ³⁻⁵

CANADIAN ARMED FORCES (CAF) NATIONAL CASE MANAGEMENT (CM) PROGRAM

- Implemented in 2000 to improve care coordination of ill or injured CAF personnel
- Currently consists of 3 national coordinators, 70 nurses, and 17 support clerks
- Provides 1-on-1 services to complex patients in 38 clinics across Canada
- Aims to provide a seamless and integrated health care process for complex patients

NEW OPPORTUNITY FOR EPIDEMIOLOGICAL RESEARCH

- Historically, data lacking to describe patient population and measure program outcomes
- Comprehensive electronic notes developed to document CM care
- These notes were added to the CAF electronic medical record system in 2016
- Data extracted from these notes can be used for epidemiological surveillance

METHODS



CM nurses complete electronic notes at point-of-care. Once completed, the notes become part of patients' medical records. The notes were designed to optimize the capture of epidemiological data.



All CM notes created between January 2018 and March 2019 were extracted from the CAF electronic medical record system. Discrete data points were linked and cleaned, to create a CM database.



CM database was deterministically linked to other CAF clinical and administrative databases, and analyzed to measure program outcomes as defined in the National CM program logic model.



Surveillance reports disseminated to national CM coordinators to help inform the allocation of CM resources, and further improve the quality of CM care offered to CAF personnel with complex healthcare needs.

WHO IS ACCESSING THE CAF NATIONAL CASE MANAGEMENT PROGRAM?

6928

6,928 individuals accessed the National CM program between January and December 2018.



21.1% of all CM patients were female and 78.9% were male. 55.5% were 40 years or older.



75.9% of all CM patients were diagnosed with a musculoskeletal disorder in the 12 months before CM program intake.



69.5% of all CM patients were diagnosed with a mental health disorder in the 12 months before CM program intake.

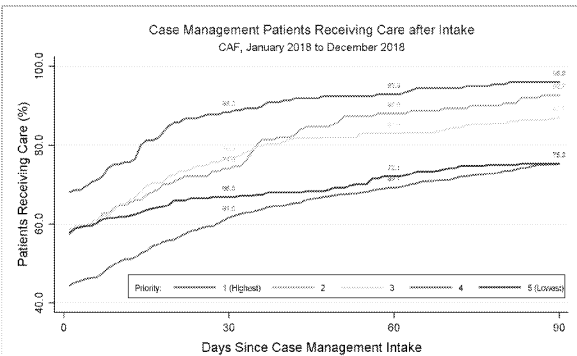
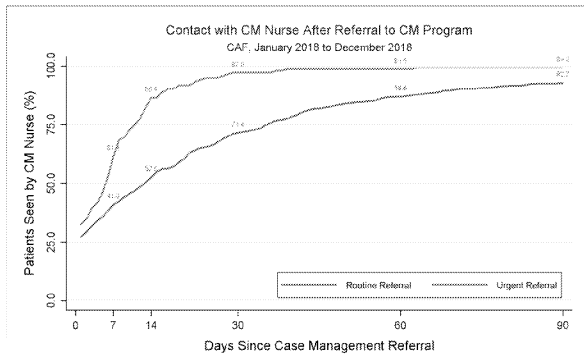


67.0% of all CM patients were diagnosed with a physical injury in the 12 months before CM program intake.



In 2018, 1,442 CAF personnel were medically released; 99.0% accessed CM services in the 12 months before their release.

HOW LONG ARE CAF PERSONNEL WAITING FOR CASE MANAGEMENT CARE?



- Patients access the CM program after referral from a clinician. 30 days after an urgent referral, **97.0%** of patients have made first contact with a CM nurse.
- New patients are screened at CM program intake, and are then assigned to a nurse case manager. 30 days after first screening at program intake, **88.3%** of highest-priority patients have started receiving CM services from their assigned CM nurse.

1. Bénébie D. 2004. Case management in the Canadian Forces. *Lippincott's Case Manag*. 9: 141-146.

2. Fath L. 2008. A primer for nursing case management. *Paediatr Child Health*. 18: s84-s88.

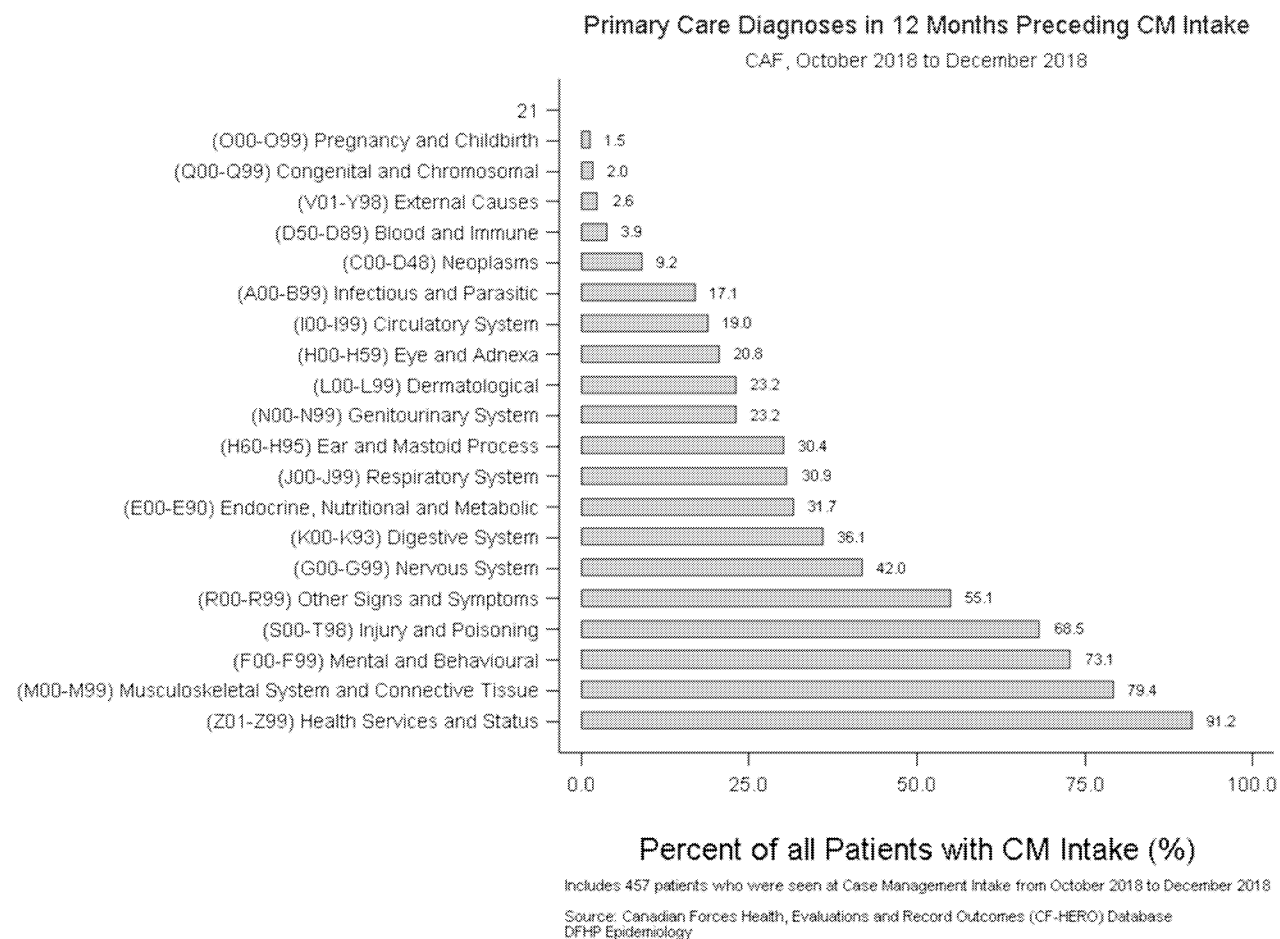
3. Gensichen J, Beyer M, Muth C, et al. 2006. Case management to improve major depression in primary health care: a systematic review. *Psychol Med*. 36: 7-14.

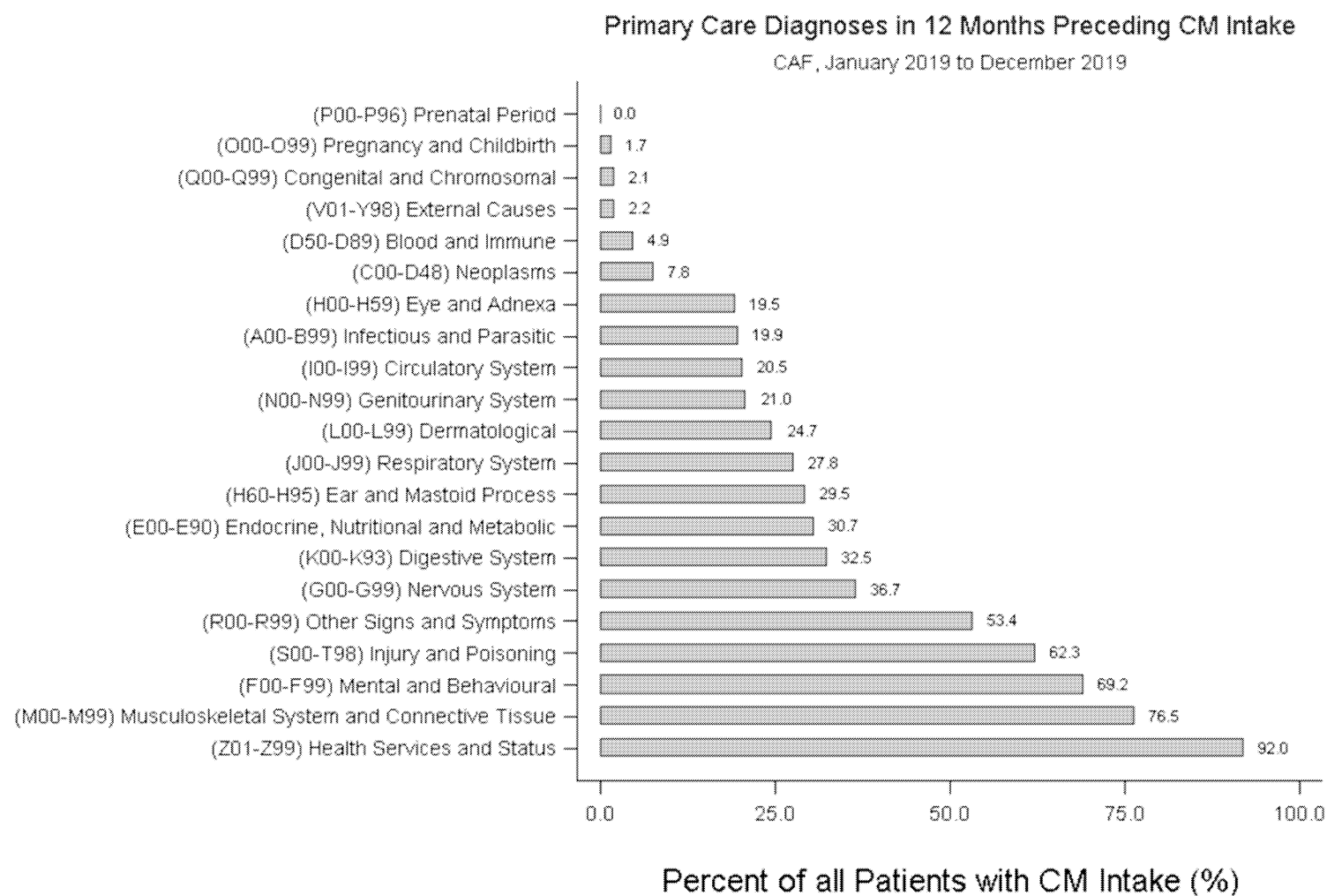
4. Tricco AC, Antony J, Ivers NM, et al. 2014. Effectiveness of quality improvement strategies for coordination of care to reduce use of health care services: a systematic review and meta-analysis. *CMAJ*. 186: e568-e578.

5. Ziguras SJ, Stuart GW. 2000. A meta-analysis of the effectiveness of mental health case management over 20 years. *Psychiatr Serv*. 51:1410-1421.

Questions?

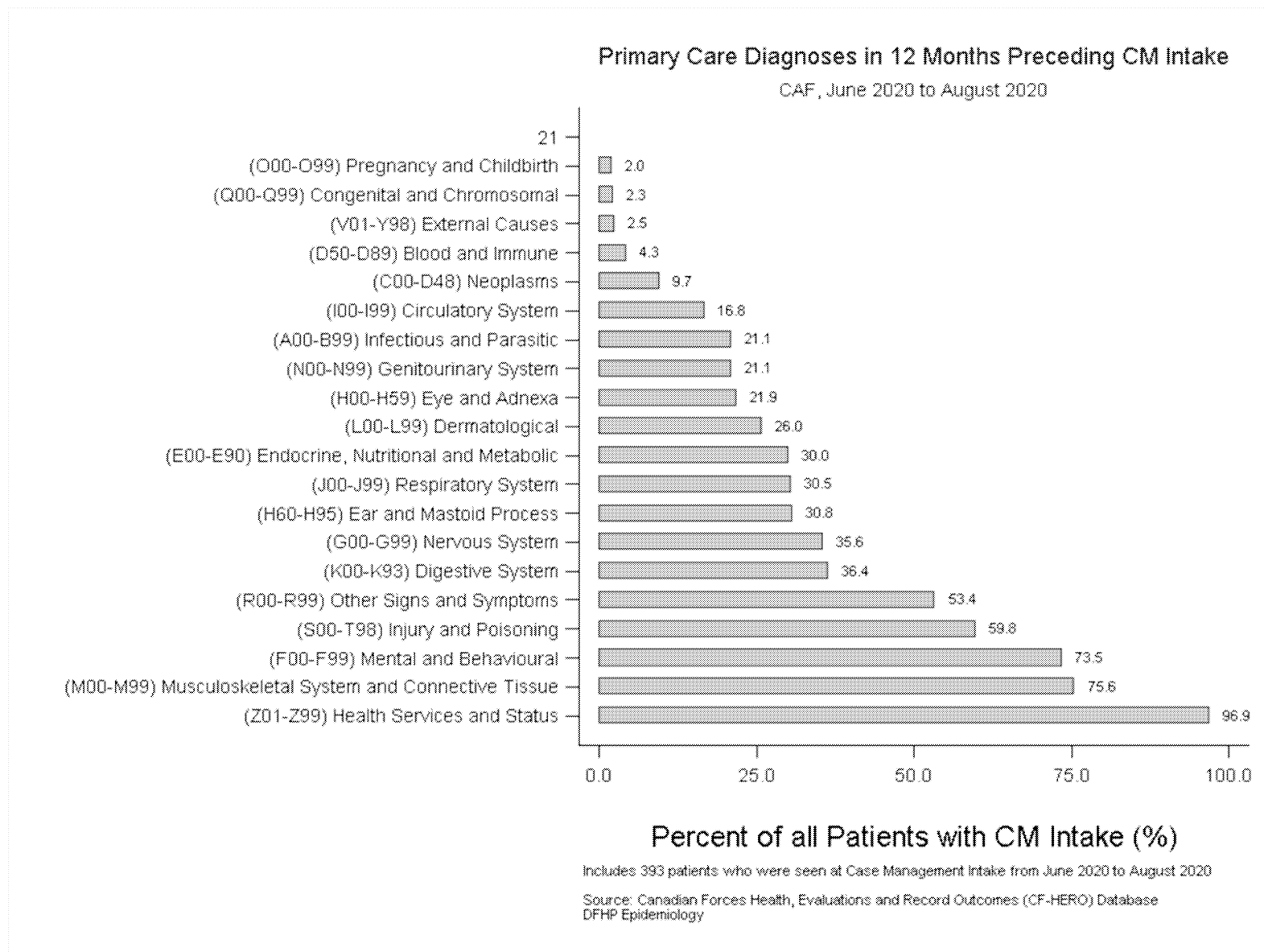
François Thériault
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Includes 2060 patients who were seen at Case Management Intake from January 2019 to December 2019

Source: Canadian Forces Health, Evaluations and Record Outcomes (CF-HERO) Database
DFHP Epidemiology



WARNING

In accordance with National Defence Security Policy, form **DND 850 - CF H Svcs Gp - Patient Safety Incident Report** is designated "**Protected B**" information once completed.

Completed "Protected B" forms **MUST NOT BE SAVED UNENCRYPTED** on any network and workstation drive or storage media. "Protected B" forms, when completed, **MUST BE ENCRYPTED USING THE DND ISSUED PKI SMARTCARD**. Failure to respect this requirement will result in a breach of security and sanctions shall be applied in accordance with the policy.

AVIS

En vertu de la politique de sécurité du Ministère de la Défense nationale, le formulaire **DND 850 - GP Svcs CF - Rapport d'incident lié à la sécurité des patients** porte la désignation « **Protégé B** » lorsque complété.

Les formulaires remplis « Protégé B » **NE DOIVENT PAS ÊTRE SAUVEGARDÉS SANS LA PROTECTION DU CHIFFRAGE NUMÉRIQUE** ni sur les lecteurs de réseau ou locaux ni sur les supports de mémoire. Les formulaires « Protégé B », une fois remplis, **PEUVENT ÊTRE SAUVEGARDER SEULEMENT PAR LE CHIFFRAGE NUMÉRIQUE AVEC LA CARTE À PUCE DE L'ICP DU MDN**. Le non-respect de cette exigence sera considéré une infraction à la sécurité et entraînera des sanctions en vertu de la politique.

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CF H Svcs Gp - Patient Safety Incident Report

GP Svcs CF - Rapport d'incident lié à la sécurité des patients

Report prepared for system-based learning from patient safety incidents and employing appropriate preventive measures for quality improvement purposes.

Le présent rapport est rédigé afin de tirer des enseignements à la suite d'incidents liés à la sécurité des patients et de prendre des mesures préventives pour améliorer la qualité des soins

Part A: Completed by the Person Reporting the Incident - Partie A : À remplir par la personne qui signale l'incident.

Do not include any identifying information other than that of the reporter.

N'inclure aucun renseignement d'identification autre que ceux qui concernent la personne qui signale l'incident.

Individual Submitting the Report - Personne qui soumet le rapport	
Date of report (dd/mm/yyyy) - Date du rapport (jj/mm/aaaa) 16/06/2015	☐ Medical - Soins médicaux ☒ Dental - Soins dentaires
Name - Nom MacPherson, DG	Position title - Titre du poste Det Comd 1 Dental Unit Det Borden
Clinic / Det - Lieu de travail Borden	
Telephone - Téléphone 705-424-1200 ext 2200	Email - Courriel David.MacPherson@forces.gc.ca
Patient Safety Incident Information <i>Note: Do not include any personal identifying information about any involved patients, staff or witnesses.</i> Informations concernant l'incident lié à la sécurité des patients <i>Remarque : N'inclure aucun renseignement personnel à propos des patients, des membres du personnel ni des témoins.</i>	
Date of incident (dd/mm/yyyy) - Date de l'incident (jj/mm/aaaa) 16/06/2015	Time of incident (hh:mm) - Heure de l'incident (hh:mm) 0745 hrs
Exact location (clinic/det) and area of care of the incident - Lieu exact de l'incident et domaine des soins Det Comd Operatory, 1 Dental Unit Det Borden (Base Dental Clinic)	
Description of the incident - Events should be concise, factual and described in the order in which they occurred. Description de l'incident - Les informations doivent être factuelles et les événements doivent être relatés de façon concise et dans l'ordre où ils se sont produits. Occurred during administration of 2% Lidocaine with 10-5 epi (Henry Schein, lot D01029E). Approx 7 mg of Lidocaine (1/5th of standard 1.7ml carpule) was infiltrated superficially into buccal vestibule at the site of the #36 (lower left 1st molar). Pt reported near-instantaneous (within 5 seconds) intense burning sensation up the left side of his face (pt described it as feeling like acid burning him...), and reported near-instantaneous (within 15 seconds) local anesthesia of the upper left lip (to the mid-line), extending up the left side of the face over the infra-orbital foraman, and the left lateral side of the nose.	
Give a brief summary of actions taken immediately after the incident to mitigate any harmful consequences and to ensure a safe environment. Faites un résumé des mesures qui ont été prises immédiatement après l'incident afin de minimiser toute conséquence néfaste et pour garantir un environnement sécuritaire. Immed exam: Left buccal mucosa was blanched superiorly from the lower vestibule, up into the maxillary vestibule. Extra-orally skin of upper left lip was blanched to midline, with blanching extending to left cheek (over infra-orbital foramen area), and along left lateral side of nose. The pt reported anesthesia in all of these areas. Vitals taken and remained normal throughout. The burning sensation resolved in approx 3-5 minutes, and local anesthesia and blanching dissipated in approx 15-20 minutes. The Lot # of the Lidocaine was removed/isolated in clinic pending confirmation of cause, and the pt was referred to Med for follow up.	

Part B: Completed by the Patient Safety Officer - Partie B : À remplir par l'agent de sécurité des patients

Date report received (dd/mm/yyyy): Date de réception du rapport (jj/mm/aaaa) :					
Patient safety incident type: Type d'incident lié à la sécurité des patients :	☐ Near miss Incident évité de justesse	☐ No harm incident Incident sans préjudice	☐ Harmful incident Incident préjudiciable		
If harmful, degree of harm: S'il s'agit d'un incident préjudiciable, en indiquer le degré :	☐ Negligible Négligeables	☐ Mild Faible	☐ Moderate Modéré	☐ Severe Grave	☐ Death Décès
Initial Risk Assessment - Évaluation préliminaire des risques					
Consequence: - Conséquences :	☐ Negligible Négligeables	☐ Minor Mineures	☐ Moderate Modérées	☐ Major Importantes	☐ Catastrophic Désastreuses
Likelihood: - Vraisemblance :	☐ Rare Très faible	☐ Unlikely Faible	☐ Possible Modérée	☐ Likely Probable	☐ Almost certain Très élevée
Risk grade: - Risques :	☐ Low Faibles	☐ Medium Modérés	☐ High Élevés	☐ Extreme Extrêmes	
Risk assessment completed by (name and title): Responsable de l'évaluation des risques (nom et le titre) :					
Initial Notifications - Notifications initiales					
☐ CO / Clinic Mgr Cmdt - gestionnaire de la clinique ☐ Dent Det Cdr Capf Dét dent ☐ Base / Wing Surgeon Médecin-chef de la base ou de l'escadre ☐ Prof / Tech Réseau professionnel et technique ☐ National Q&PS Cellule nationale de la Q et SP ☐ Other: Autre : _____					
Method of analysis: Méthode d'analyse :	☐ Local analysis Analyse locale	☐ Regional analysis Analyse régionale	☐ National analysis Analyse nationale		

If you have questions about a patient safety incident, contact your local Patient Safety Officer or e-mail +Patient Safety-Sécurité des Patients@CMP DHSD@Ottawa-Hull.

Si vous avez des questions sur un incident de sécurité des patients, contactez votre Agent de la sécurité des patients local ou par courriel à +Patient Safety-Sécurité des Patients@CMP DHSD@Ottawa-Hull.

Patient safety incident reporting is an indication of a positive safety culture.

Signaler les incidents liés à la sécurité des patients est signe d'une saine culture de la sécurité.