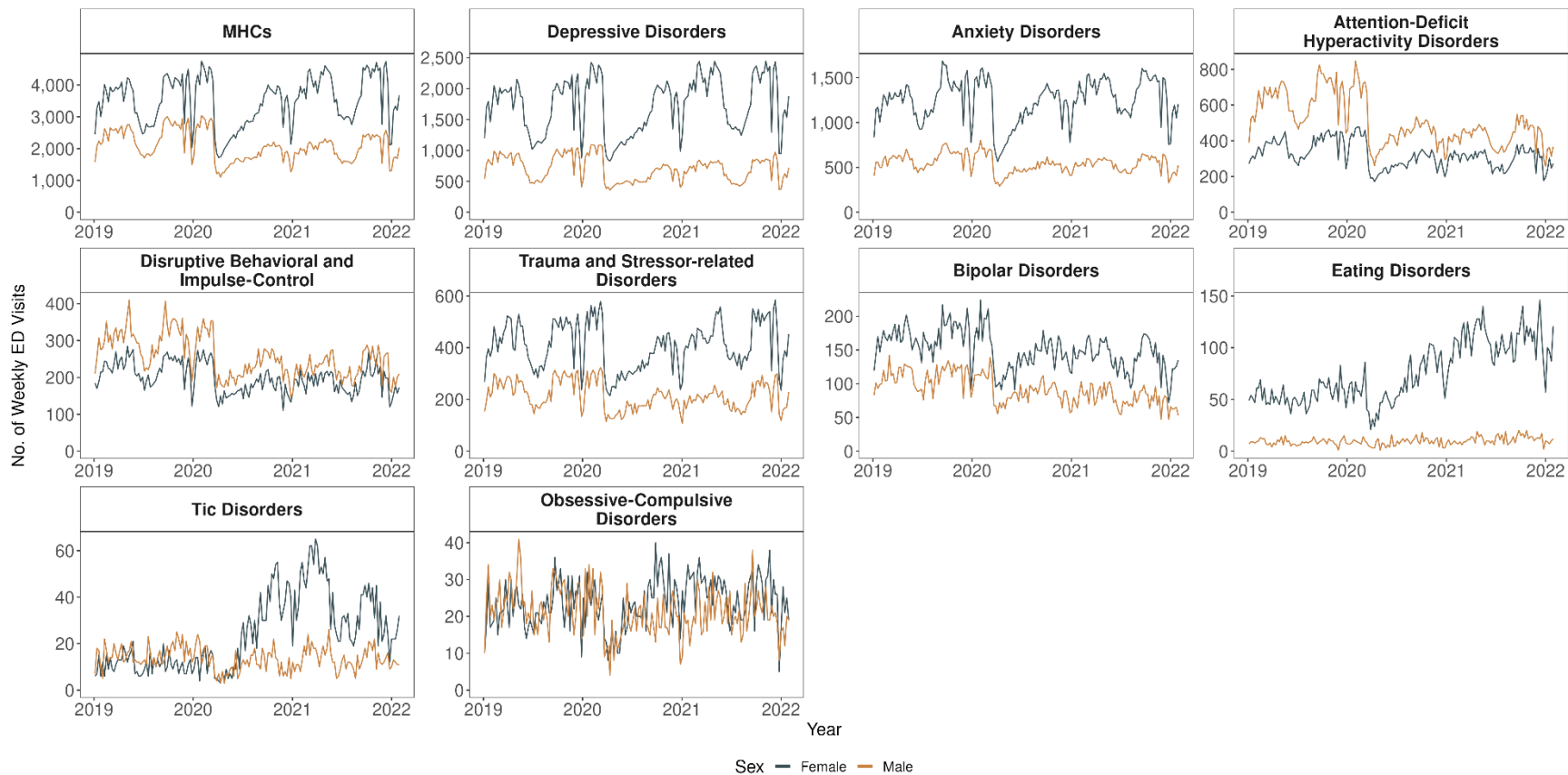


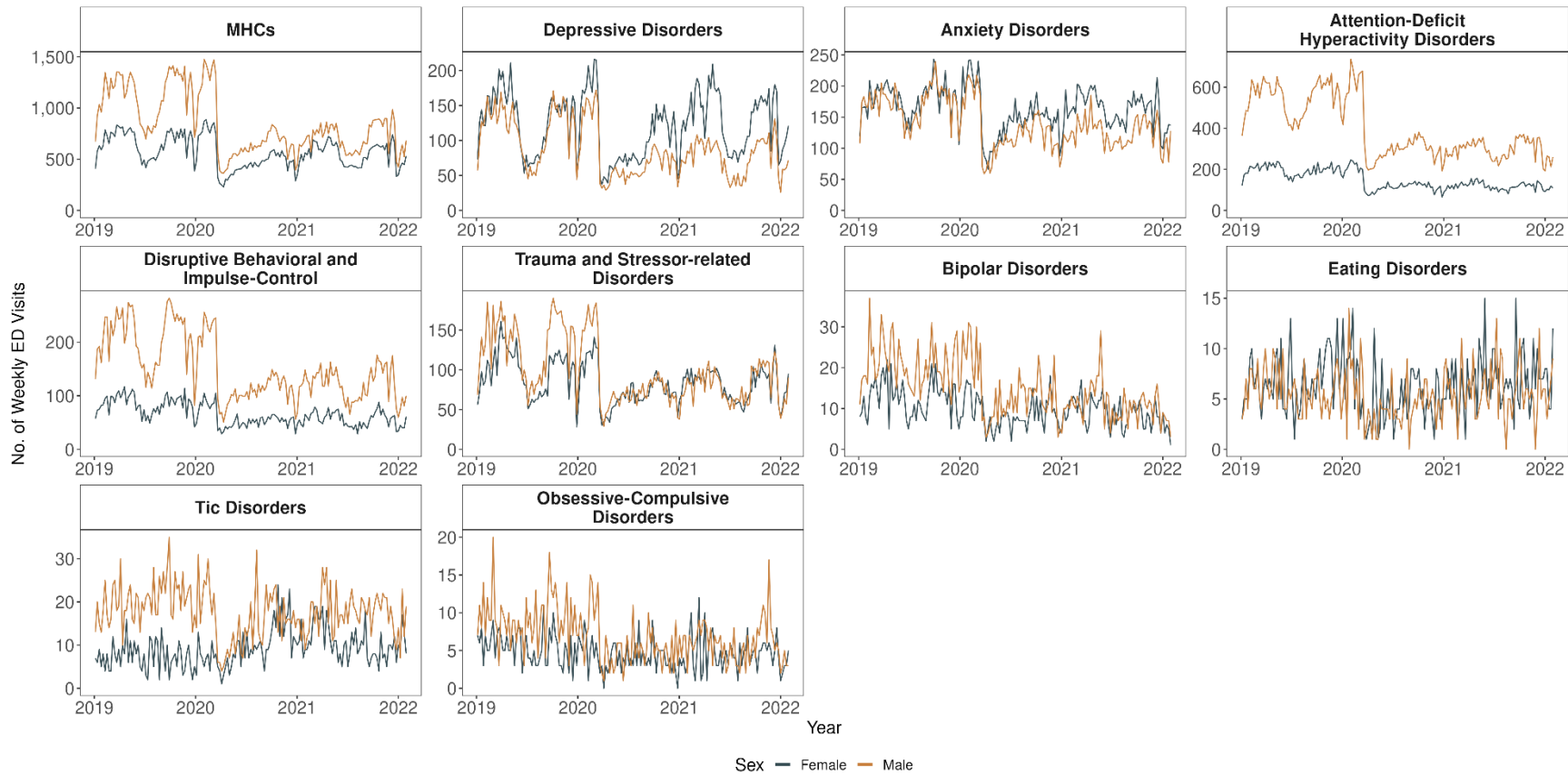
**SUPPLEMENTARY FIGURE 1. Weekly number of emergency department (ED) visits\* for mental health conditions (MHCs)<sup>†</sup>, among adolescents 12–17 years, by sex —National Syndromic Surveillance Program, United States, 2019–2022**



\* The National Syndromic Surveillance Program receives anonymized medical record information from approximately 71% of nonfederal EDs nationwide. To reduce artifactual impact from changes in reporting patterns, analyses were restricted to facilities with a coefficient of variation  $\leq 40$  and average weekly informative discharge diagnosis  $\geq 75\%$  complete during 2019–2022.

<sup>†</sup> NSSP collects free-text reason for visit (chief complaint), discharge diagnosis, and patient demographic details. Diagnosis information is collected using the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) codes International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) codes, and Systematized Nomenclature of Medicine (SNOMED) codes. Free-text keywords and diagnostic codes combined using Boolean searches were used to create distinct keyword syndromes to identify visits associated with overall mental health conditions (MHCs) and nine distinct disorders (depression; anxiety; attention-deficit/hyperactivity; trauma and stressor-related; disruptive behavioral and impulse-control; bipolar; eating; tic; obsessive-compulsive). Overall MHCs keyword syndrome captures any mental health-related visit, individual nine mental disorders, schizophrenia spectrum disorders, some additional low prevalence mental health conditions (e.g., reactive attachment disorder, delusional disorders, somatoform disorders, etc.), and general mental health terms and codes.

**SUPPLEMENTARY FIGURE 2. Weekly number of emergency department (ED) visits\* for mental health conditions (MHCs)<sup>†</sup>, among children 5–11 years, by sex —National Syndromic Surveillance Program, United States, 2019–2022**



\* The National Syndromic Surveillance Program receives anonymized medical record information from approximately 71% of nonfederal EDs nationwide. To reduce artifactual impact from changes in reporting patterns, analyses were restricted to facilities with a coefficient of variation  $\leq 40$  and average weekly informative discharge diagnosis  $\geq 75\%$  complete during 2019–2022

<sup>†</sup> NSSP collects free-text reason for visit (chief complaint), discharge diagnosis, and patient demographic details. Diagnosis information is collected using the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) codes International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) codes, and Systematized Nomenclature of Medicine (SNOMED) codes. Free-text keywords and diagnostic codes combined using Boolean searches were used to create distinct keyword syndromes definitions to identify visits associated with overall mental health conditions (MHCs) and nine distinct disorders (depression; anxiety; attention-deficit/hyperactivity; trauma and stressor-related; disruptive behavioral and impulse-control; bipolar; eating; tic; obsessive-compulsive). Overall MHCs keyword syndrome captures any mental health-related visit, individual nine mental disorders, schizophrenia spectrum disorders, some additional low prevalence mental health conditions (e.g., reactive attachment disorder, delusional disorders, somatoform disorders, etc.), and general mental health terms and codes.

**TABLE. Mean weekly number of emergency department (ED) visits\*, percentage change† in ED visits, and visit ratios (VRs)§ for mental health conditions (MHCs)¶ among children and adolescents aged <18 years — National Syndromic Surveillance Program\*\* — United States, 2019–2022**

Surveillance Period/ Indicators††	2020 (March 15–2020–January 2–2021)			2021 (January 3–2021–January 1–2022)			2022 (January 2–2022–January 29 –2022)		
	Mean weekly ED visit counts for health conditions– surveillance period††	Change in mean weekly ED visit counts for health conditions (% change)	Visit ratio (95% CI)	Mean weekly ED visit counts for health conditions– surveillance period††	Change in mean weekly ED visit counts for health conditions (% change)	Visit ratio (95% CI)	Mean weekly ED visit counts for health conditions– surveillance period††	Change in mean weekly ED visit counts for health conditions (% change)	Visit ratio (95% CI)
<b>Overall Mental Health Conditions§§</b>									
<b>All Ages, 0–17</b>									
All	5,712	2,156 (-27)	1.49 (1.48–1.49)	7,201	614 (-8)	1.17 (1.16–1.17)	6,308	309 (-5)	1.12 (1.10–1.14)
Females	3,359	901 (-21)	1.58 (1.57–1.59)	4,403	163 (4)	1.31 (1.30–1.32)	3,855	214 (6)	1.24 (1.21–1.27)
Males	2,338	1,252 (-35)	1.36 (1.35–1.37)	2,779	779 (-22)	0.99 (0.99–1.00)	2,432	526 (-18)	0.96 (0.94–0.99)
Female/Male Ratio¶¶	–	–	1.49 (1.48–1.51)	–	–	1.69 (1.68–1.70)	–	–	1.63 (1.59–1.67)
<b>Ages 0–4</b>									
All	68	39 (-37)	1.42 (1.35–1.48)	83	22 (-21)	0.99 (0.95–1.03)	72	18 (-20)	1.02 (0.87–1.19)
Females	28	14 (-33)	1.49 (1.39–1.61)	36	5 (-13)	1.09 (1.02–1.16)	34	5 (-13)	1.12 (0.89–1.41)
Males	40	26 (-39)	1.36 (1.28–1.45)	47	16 (-26)	0.92 (0.87–0.97)	38	14 (-26)	0.93 (0.75–1.14)
Female/Male Ratio	–	–	0.84 (0.78–0.91)	–	–	0.92 (0.86–0.97)	–	–	1.05 (0.84–1.33)
<b>Ages 5–11</b>									
All	1,036	760 (-42)	1.28 (1.27–1.30)	1,280	507 (-29)	1.00 (0.99–1.01)	1,073	382 (-26)	0.90 (0.87–0.94)
Females	432	231 (-35)	1.45 (1.43–1.48)	556	105 (-16)	1.19 (1.17–1.20)	467	86 (-16)	1.05 (0.99–1.11)
Males	600	529 (-47)	1.18 (1.16–1.19)	720	401 (-36)	0.89 (0.88–0.90)	602	296 (-33)	0.81 (0.77–0.85)
Female/Male Ratio	–	–	0.83 (0.82–0.85)	–	–	0.89 (0.88–0.90)	–	–	0.85 (0.80–0.90)
<b>Ages 12–17</b>									
All	4,608	1,356 (-23)	1.30 (1.29–1.31)	5,838	86 (-2)	1.15 (1.15–1.16)	5,163	92 (2)	1.01 (0.99–1.03)
Females	2,899	657 (-19)	1.33 (1.32–1.33)	3,812	274 (8)	1.24 (1.24–1.25)	3,354	305 (10)	1.09 (1.06–1.11)
Males	1,699	697 (-29)	1.24 (1.23–1.25)	2,012	362 (-15)	1.01 (1.00–1.02)	1,792	216 (-11)	0.89 (0.86–0.91)
Female/Male Ratio	–	–	1.39 (1.37–1.40)	–	–	1.58 (1.57–1.59)	–	–	1.46 (1.42–1.51)
<b>Depressive disorders</b>									
<b>All Ages, 0–17</b>									
All	2,132	583 (-22)	1.61 (1.59–1.62)	2,834	89 (3)	1.31 (1.30–1.32)	2,452	62 (-3)	1.14 (1.11–1.17)
Females	1,519	290 (-16)	1.68 (1.66–1.70)	2,053	227 (13)	1.42 (1.41–1.43)	1,764	104 (6)	1.24 (1.20–1.29)
Males	607	291 (-32)	1.41 (1.39–1.43)	773	140 (-15)	1.08 (1.06–1.09)	678	168 (-20)	0.94 (0.89–0.99)
Female/Male Ratio	–	–	2.60 (2.56–2.64)	–	–	2.83 (2.80–2.86)	–	–	2.67 (2.55–2.79)
<b>Ages 0–4</b>									
All	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Females	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Males	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Female/Male Ratio	–	N/A	N/A	–	–	N/A	–	–	N/A
<b>Ages 5–11</b>									
All	144	94 (-40)	1.34 (1.30–1.39)	210	35 (-14)	1.20 (1.17–1.23)	165	53 (-24)	0.93 (0.84–1.02)
Females	86	41 (-32)	1.51 (1.45–1.58)	132	2 (2)	1.44 (1.39–1.49)	102	15 (-13)	1.08 (0.95–1.24)

Males	58	53 (-48)	1.16 (1.10–1.21)	77	37 (-33)	0.94 (0.90–0.98)	62	38 (-38)	0.75 (0.64–0.88)
Female/Male Ratio	–	–	1.71 (1.63–1.80)	–	–	1.97 (1.90–2.05)	–	–	1.79 (1.53–2.09)
<b>Ages 12–17</b>									
All	1,983	487 (-20)	1.35 (1.34–1.36)	2,620	124 (5)	1.23 (1.22–1.24)	2,283	8 (0)	0.99 (0.96–1.02)
Females	1,432	249 (-15)	1.38 (1.37–1.40)	1,919	225 (13)	1.31 (1.30–1.32)	1,659	120 (8)	1.07 (1.03–1.10)
Males	547	237 (-30)	1.22 (1.20–1.24)	693	102 (-13)	1.04 (1.02–1.05)	614	130 (-17)	0.82 (0.78–0.86)
Female/Male Ratio	–	–	2.12 (2.09–2.16)	–	–	2.31 (2.28–2.34)	–	–	2.11 (2.02–2.21)
<b>Anxiety disorders</b>									
<b>All Ages, 0–17</b>									
All	1,794	466 (-21)	1.62 (1.61–1.64)	2,194	32 (-1)	1.25 (1.24–1.26)	1,858	30 (-2)	1.15 (1.12–1.19)
Females	1,204	264 (-18)	1.64 (1.62–1.66)	1,509	65 (5)	1.32 (1.30–1.33)	1,280	75 (6)	1.24 (1.20–1.29)
Males	584	202 (-26)	1.55 (1.52–1.58)	675	99 (-13)	1.11 (1.09–1.12)	569	107 (-16)	0.99 (0.93–1.04)
Female/Male Ratio	–	–	2.14 (2.11–2.18)	–	–	2.38 (2.35–2.41)	–	–	2.31 (2.20–2.43)
<b>Ages 0–4</b>									
All	14	7 (-34)	1.48 (1.34–1.64)	18	3 (-14)	1.07 (0.98–1.17)	17	6 (-26)	0.94 (0.69–1.29)
Females	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Males	N/A	N/A	N/A	10	2 (-17)	1.03 (0.92–1.17)	N/A	N/A	N/A
Female/Male Ratio	–	–	N/A	–	–	N/A	–	–	N/A
<b>Ages 5–11</b>									
All	247	107 (-30)	1.55 (1.51–1.59)	292	59 (-17)	1.16 (1.14–1.19)	239	76 (-24)	0.93 (0.85–1.01)
Females	134	46 (-26)	1.66 (1.60–1.72)	165	14 (-8)	1.30 (1.26–1.34)	131	23 (-15)	1.06 (0.94–1.19)
Males	111	61 (-36)	1.43 (1.38–1.48)	125	46 (-27)	1.02 (0.99–1.05)	108	51 (-32)	0.82 (0.72–0.92)
Female/Male Ratio	–	–	1.40 (1.35–1.46)	–	–	1.52 (1.47–1.57)	–	–	1.34 (1.18–1.52)
<b>Ages 12–17</b>									
All	1,533	352 (-19)	1.37 (1.35–1.38)	1,883	30 (2)	1.19 (1.18–1.20)	1,603	51 (3)	1.02 (0.99–1.06)
Females	1,062	215 (-17)	1.35 (1.34–1.37)	1,336	80 (6)	1.23 (1.21–1.24)	1,140	100 (10)	1.08 (1.04–1.13)
Males	466	137 (-23)	1.35 (1.33–1.38)	540	52 (-9)	1.09 (1.07–1.10)	453	52 (-10)	0.89 (0.84–0.95)
Female/Male Ratio	–	–	1.85 (1.82–1.88)	–	–	2.06 (2.03–2.09)	–	–	1.97 (1.87–2.08)
<b>Attention-deficit/hyperactivity disorders</b>									
<b>All Ages, 0–17</b>									
All	1,092	700 (-39)	1.25 (1.23–1.26)	1,162	603 (-34)	0.83 (0.82–0.84)	987	424 (-30)	0.82 (0.79–0.85)
Females	378	199 (-35)	1.31 (1.29–1.34)	422	146 (-26)	0.94 (0.92–0.95)	376	89 (-19)	0.95 (0.88–1.01)
Males	710	501 (-41)	1.22 (1.21–1.24)	736	458 (-38)	0.78 (0.77–0.79)	605	336 (-36)	0.75 (0.72–0.79)
Female/Male Ratio	–	–	0.55 (0.54–0.56)	–	–	0.61 (0.60–0.62)	–	–	0.64 (0.60–0.68)
<b>Ages 0–4</b>									
All	11	11 (-50)	1.12 (1.00–1.25)	11	9 (-46)	0.67 (0.61–0.74)	10	4 (-29)	0.91 (0.60–1.36)
Females	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Males	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Female/Male Ratio	–	–	N/A	–	–	N/A	–	–	N/A
<b>Ages 5–11</b>									
All	399	349 (-47)	1.18 (1.16–1.21)	421	322 (-43)	0.79 (0.78–0.81)	360	248 (-41)	0.72 (0.68–0.77)
Females	110	86 (-44)	1.25 (1.21–1.30)	119	76 (-39)	0.86 (0.83–0.89)	108	56 (-34)	0.81 (0.72–0.92)
Males	287	264 (-48)	1.15 (1.13–1.18)	301	246 (-45)	0.77 (0.75–0.78)	250	192 (-44)	0.68 (0.63–0.74)
Female/Male Ratio	–	–	0.44 (0.43–0.46)	–	–	0.46 (0.44–0.47)	–	–	0.48 (0.43–0.53)
<b>Ages 12–17</b>									
All	682	340 (-33)	1.12 (1.10–1.14)	730	272 (-27)	0.85 (0.84–0.86)	617	172 (-22)	0.77 (0.73–0.82)

Females	265	111 (-29)	1.15 (1.12–1.17)	300	67 (-18)	0.94 (0.92–0.96)	264	32 (-11)	0.88 (0.81–0.96)
Males	415	229 (-36)	1.13 (1.10–1.15)	428	204 (-32)	0.80 (0.79–0.82)	349	140 (-29)	0.71 (0.66–0.76)
Female/Male Ratio	–	–	0.52 (0.51–0.53)	–	–	0.58 (0.57–0.60)	–	–	0.59 (0.55–0.64)
<b>Trauma and stressor–related disorders</b>									
<b>All Ages, 0–17</b>									
All	646	265 (-29)	1.45 (1.43–1.47)	817	85 (-9)	1.15 (1.13–1.16)	720	21 (-3)	1.14 (1.08–1.20)
Females	398	131 (-25)	1.51 (1.48–1.54)	521	0 (0)	1.26 (1.24–1.28)	466	38 (9)	1.28 (1.19–1.36)
Males	243	134 (-36)	1.34 (1.31–1.38)	292	85 (-23)	0.98 (0.96–1.00)	249	63 (-20)	0.94 (0.86–1.02)
Female/Male Ratio	–	–	1.70 (1.66–1.75)	–	–	1.90 (1.87–1.94)	–	–	1.92 (1.78–2.08)
<b>Ages 0–4</b>									
All	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Females	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Males	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Female/Male Ratio	–	–	N/A	–	–	N/A	–	–	N/A
<b>Ages 5–11</b>									
All	134	96 (-42)	1.29 (1.25–1.34)	166	63 (-28)	1.01 (0.99–1.04)	138	47 (-25)	0.91 (0.82–1.02)
Females	65	33 (-34)	1.48 (1.41–1.55)	82	15 (-16)	1.19 (1.14–1.24)	72	4 (-6)	1.17 (1.00–1.38)
Males	67	63 (-49)	1.14 (1.09–1.19)	82	48 (-37)	0.88 (0.84–0.91)	65	44 (-40)	0.72 (0.62–0.84)
Female/Male Ratio	–	–	1.13 (1.07–1.19)	–	–	1.15 (1.10–1.20)	–	–	1.23 (1.04–1.45)
<b>Ages 12–17</b>									
All	507	167 (-25)	1.26 (1.24–1.29)	647	20 (-3)	1.13 (1.12–1.15)	576	24 (4)	1.03 (0.98–1.10)
Females	331	97 (-23)	1.26 (1.23–1.28)	436	15 (4)	1.19 (1.17–1.22)	390	42 (12)	1.11 (1.03–1.19)
Males	174	69 (-29)	1.25 (1.21–1.29)	207	35 (-15)	1.02 (0.99–1.04)	181	20 (-10)	0.90 (0.81–0.99)
Female/Male Ratio	–	–	1.55 (1.50–1.59)	–	–	1.76 (1.72–1.80)	–	–	1.69 (1.54–1.84)
<b>Disruptive behavioral and impulse disorders</b>									
<b>All Ages, 0–17</b>									
All	550	288 (-34)	1.34 (1.32–1.36)	609	221 (-27)	0.93 (0.92–0.94)	504	199 (-28)	0.84 (0.79–0.89)
Females	219	96 (-30)	1.40 (1.36–1.43)	249	63 (-20)	1.01 (0.98–1.03)	215	50 (-19)	0.95 (0.87–1.04)
Males	328	193 (-37)	1.31 (1.29–1.34)	357	157 (-31)	0.88 (0.87–0.90)	288	148 (-34)	0.77 (0.72–0.83)
Female/Male Ratio	–	–	0.70 (0.68–0.71)	–	–	0.74 (0.73–0.76)	–	–	0.77 (0.70–0.84)
<b>Ages 0–4</b>									
All	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Females	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Males	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Female/Male Ratio	–	–	N/A	–	–	N/A	–	–	N/A
<b>Ages 5–11</b>									
All	156	138 (-47)	1.18 (1.14–1.21)	181	111 (-38)	0.87 (0.85–0.89)	135	105 (-44)	0.69 (0.62–0.76)
Females	50	35 (-42)	1.30 (1.23–1.37)	57	28 (-33)	0.94 (0.90–0.99)	46	25 (-35)	0.80 (0.67–0.97)
Males	105	103 (-50)	1.12 (1.08–1.16)	124	82 (-40)	0.83 (0.81–0.86)	88	80 (-48)	0.63 (0.56–0.72)
Female/Male Ratio	–	–	0.55 (0.52–0.58)	–	–	0.53 (0.51–0.55)	–	–	0.58 (0.49–0.69)
<b>Ages 12–17</b>									
All	388	144 (-27)	1.22 (1.20–1.25)	421	105 (-20)	0.94 (0.92–0.95)	363	91 (-20)	0.79 (0.74–0.85)
Females	167	59 (-26)	1.20 (1.17–1.24)	190	33 (-15)	0.98 (0.96–1.01)	166	24 (-13)	0.86 (0.78–0.96)
Males	219	86 (-28)	1.26 (1.22–1.29)	230	71 (-24)	0.91 (0.89–0.93)	197	65 (-25)	0.75 (0.68–0.82)
Female/Male Ratio	–	–	0.62 (0.60–0.64)	–	–	0.69 (0.67–0.71)	–	–	0.66 (0.59–0.73)

<b>Bipolar disorders</b>									
<b>All Ages, 0–17</b>									
All	237	82 (-26)	1.52 (1.48–1.56)	240	75 (-24)	0.96 (0.94–0.99)	200	65 (-25)	0.88 (0.81–0.97)
Females	142	43 (-23)	1.53 (1.48–1.59)	148	34 (-19)	1.02 (0.99–1.06)	132	23 (-15)	0.99 (0.89–1.12)
Males	94	39 (-29)	1.48 (1.42–1.54)	91	41 (-31)	0.87 (0.84–0.91)	67	43 (-39)	0.71 (0.61–0.83)
Female/Male Ratio	–	–	1.56 (1.50–1.63)	–	–	1.75 (1.68–1.81)	–	–	2.01 (1.73–2.33)
<b>Ages 0–4</b>									
All	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Females	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Males	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Female/Male Ratio	–	–	N/A	–	–	N/A	–	–	N/A
<b>Ages 5–11</b>									
All	19	15 (-43)	1.26 (1.16–1.37)	20	13 (-39)	0.85 (0.79–0.92)	10	15 (-60)	0.49 (0.34–0.71)
Females	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Males	11	9 (-45)	1.21 (1.08–1.35)	11	9 (-46)	0.76 (0.68–0.84)	N/A	N/A	N/A
Female/Male Ratio	–	–	N/A	–	–	N/A	–	–	N/A
<b>Ages 12–17</b>									
All	217	67 (-24)	1.28 (1.25–1.32)	219	62 (-22)	0.91 (0.89–0.93)	189	51 (-21)	0.78 (0.71–0.86)
Females	134	38 (-22)	1.27 (1.22–1.31)	139	30 (-18)	0.95 (0.92–0.98)	126	19 (-13)	0.86 (0.76–0.97)
Males	83	29 (-26)	1.30 (1.24–1.35)	79	31 (-29)	0.85 (0.82–0.89)	61	33 (-35)	0.64 (0.55–0.75)
Female/Male Ratio	–	–	1.32 (1.26–1.37)	–	–	1.47 (1.41–1.53)	–	–	1.63 (1.40–1.89)
<b>Eating disorders</b>									
<b>All Ages, 0–17</b>									
All	91	0 (0)	2.04 (1.95–2.13)	145	54 (60)	2.02 (1.95–2.10)	134	52 (64)	1.92 (1.67–2.20)
Females	73	5 (7)	2.15 (2.04–2.26)	121	53 (78)	2.25 (2.16–2.34)	112	49 (79)	2.09 (1.79–2.44)
Males	17	5 (-23)	1.60 (1.45–1.76)	24	1 (3)	1.31 (1.21–1.42)	21	1 (6)	1.25 (0.92–1.70)
Female/Male Ratio	–	–	4.36 (4.02–4.72)	–	–	5.47 (5.15–5.82)	–	–	5.53 (4.38–6.99)
<b>Ages 0–4</b>									
All	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Females	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Males	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Female/Male Ratio	–	–	N/A	–	–	N/A	–	–	N/A
<b>Ages 5–11</b>									
All	N/A	N/A	N/A	13	0 (1)	1.42 (1.27–1.58)	13	4 (47)	1.80 (1.18–2.75)
Females	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Males	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Female/Male Ratio	–	–	N/A	–	–	N/A	–	–	N/A
<b>Ages 12–17</b>									
All	73	10 (17)	1.96 (1.86–2.07)	119	56 (90)	2.22 (2.13–2.32)	112	54 (92)	1.90 (1.62–2.22)
Females	64	11 (20)	1.95 (1.84–2.06)	107	53 (99)	2.29 (2.19–2.40)	101	51 (102)	1.99 (1.68–2.36)
Males	N/A	N/A	N/A	12	3 (30)	1.55 (1.37–1.75)	10	1 (15)	1.14 (0.72–1.82)
Female/Male Ratio	–	–	N/A	–	–	7.76 (7.13–8.44)	–	–	8.34 (5.98–11.63)
<b>Tic disorders</b>									
<b>All Ages, 0–17</b>									
All	64	4 (7)	2.19 (2.07–2.31)	85	26 (45)	1.83 (1.75–1.92)	70	22 (45)	1.69 (1.41–2.03)
Females	37	17 (82)	3.65 (3.36–3.97)	50	30 (151)	3.16 (2.94–3.40)	39	23 (144)	2.85 (2.13–3.82)

Males	27	12 (-31)	1.43 (1.33–1.54)	35	4 (-10)	1.15 (1.08–1.22)	31	2 (-5)	1.12 (0.87–1.43)
Female/Male Ratio	–	–	1.41 (1.31–1.52)	–	–	1.51 (1.43–1.61)	–	–	1.30 (1.03–1.65)
<b>Ages 0–4</b>									
All	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Females	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Males	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Female/Male Ratio	–	–	N/A	–	–	N/A	–	–	N/A
<b>Ages 5–11</b>									
All	24	4 (-15)	1.89 (1.74–2.06)	28	0 (2)	1.42 (1.32–1.53)	27	5 (23)	1.50 (1.13–1.99)
Females	10	3 (36)	3.04 (2.63–3.52)	10	3 (44)	2.03 (1.78–2.31)	12	5 (74)	2.16 (1.35–3.47)
Males	14	7 (-33)	1.49 (1.34–1.65)	18	3 (-14)	1.20 (1.10–1.31)	15	0 (0.0)	1.21 (0.85–1.72)
Female/Male Ratio	–	–	0.83 (0.73–0.94)	–	–	0.69 (0.62–0.76)	–	–	0.85 (0.58–1.24)
<b>Ages 12–17</b>									
All	36	9 (33)	2.23 (2.06–2.41)	52	25 (95)	2.28 (2.14–2.44)	37	16 (75)	1.74 (1.33–2.27)
Females	25	14 (125)	3.65 (3.28–4.07)	38	27 (241)	3.94 (3.59–4.32)	26	17 (200)	2.96 (2.01–4.37)
Males	10	5 (-33)	1.16 (1.03–1.31)	14	2 (-10)	1.07 (0.97–1.18)	12	1 (-8)	0.92 (0.62–1.36)
Female/Male Ratio	–	–	1.97 (1.77–2.21)	–	–	2.29 (2.10–2.49)	–	–	1.70 (1.20–2.40)
<b>Obsessive–compulsive disorders</b>									
<b>All Ages, 0–17</b>									
All	49	14 (-23)	1.58 (1.49–1.68)	59	3 (-5)	1.20 (1.14–1.26)	48	10 (-17)	0.98 (0.81–1.18)
Females	26	3 (-10)	1.81 (1.67–1.96)	31	3 (10)	1.39 (1.30–1.49)	27	2 (6)	1.24 (0.94–1.63)
Males	22	12 (-34)	1.37 (1.26–1.49)	28	6 (-19)	1.03 (0.96–1.11)	21	12 (-35)	0.76 (0.58–1.00)
Female/Male Ratio	–	–	1.20 (1.10–1.31)	–	–	1.20 (1.12–1.29)	–	–	1.31 (0.98–1.74)
<b>Ages 0–4</b>									
All	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Females	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Males	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Female/Male Ratio	–	–	N/A	–	–	N/A	–	–	N/A
<b>Ages 5–11</b>									
All	N/A	N/A	N/A	11	4 (-27)	1.03 (0.92–1.15)	N/A	N/A	N/A
Females	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Males	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Female/Male Ratio	–	–	N/A	–	–	N/A	–	–	N/A
<b>Ages 12–17</b>									
All	39	8 (-17)	1.39 (1.31–1.49)	48	1 (3)	1.20 (1.14–1.27)	41	0 (0)	0.99 (0.80–1.23)
Females	22	1 (-5)	1.54 (1.41–1.69)	26	4 (18)	1.36 (1.26–1.47)	23	5 (26)	1.24 (0.92–1.69)
Males	17	7 (-29)	1.24 (1.13–1.37)	21	3 (-12)	1.05 (0.96–1.13)	17	5 (-24)	0.76 (0.55–1.04)
Female/Male Ratio	–	–	1.02 (0.93–1.13)	–	–	1.04 (0.96–1.13)	–	–	1.07 (0.78–1.46)

**Abbreviations:** CI = confidence interval; ED = emergency department; N/A = not applicable.

\* To reduce artifactual impact from changes in reporting patterns, analyses were restricted to facilities with a coefficient of variation ≤40 and average weekly informative discharge diagnosis ≥75% complete during 2019–2022.

† Percent change in visits per week during each surveillance period was calculated as the difference in mean weekly visits between the surveillance period and the comparison period, divided by the mean weekly visits during the comparison period, times 100. ((mean weekly ED visits with health outcome during surveillance period– mean weekly ED visits with health outcome during comparison period)/ mean weekly ED visits with health outcome during comparison period\*100%)

<sup>§</sup> Visit ratios = Proportion ED visits with health outcome during the surveillance period, divided by the proportion of ED visits with health outcome during the comparison period ((ED visits with health outcome {surveillance period}/all ED visits {surveillance period})/(ED visits with health outcome {comparison period}/all ED visits {comparison period})). Ratios >1 indicate a higher proportion of ED visits with the health outcome during the surveillance period than the comparison period; ratios <1 indicate a lower proportion during the surveillance period than during the comparison period.

<sup>¶</sup> Nssp collects free-text reason for visit (chief complaint), discharge diagnosis, and patient demographic details. Diagnosis information is collected using the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) codes International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) codes, and Systematized Nomenclature of Medicine (SNOMED) codes. Free-text keywords and diagnostic codes combined using Boolean searches were used to create distinct keyword syndromes to identify visits associated with overall mental health conditions (MHCs) and nine distinct disorders (depression; anxiety; attention-deficit/hyperactivity; trauma and stressor-related; disruptive behavioral and impulse-control; bipolar; eating; tic; obsessive-compulsive). Overall MHCs keyword syndrome captures any mental health-related visit, individual nine mental disorders, schizophrenia spectrum disorders, some additional low prevalence mental health conditions (e.g., reactive attachment disorder, delusional disorders, somatoform disorders, etc.), and general mental health terms and codes.

<sup>\*\*</sup> Nssp is a collaboration among the Centers for Disease Control and Prevention (CDC), local, and state health departments, and federal, academic, and private sector partners. Nssp receives anonymized medical record information from about 71% of EDs nationwide, although fewer than 50% of facilities from California, Hawaii, Iowa, Maryland, Minnesota, and Oklahoma currently participate in Nssp.

<sup>††</sup> Cells with N/A (not applicable) indicate suppressed results due to small cell size (<10 mean weekly ED visits).

<sup>§§</sup> Overall MHCs keyword syndrome captures any mental health-related visit, individual nine mental disorders, schizophrenia spectrum, some additional low prevalence mental health conditions (e.g., reactive attachment disorder, delusional disorders, somatoform disorders, etc.), and general mental health terms and codes.

<sup>¶¶</sup> Female to male visit ratios = (proportion of ED visits with health outcome during surveillance period for females/proportion of ED visits with health outcome during surveillance period for males). These ratios do not include a temporal comparison. Ratios >1 indicate a higher proportion of ED visits with health outcome during the surveillance period for females compared with males.



**SUPPLEMENTARY BOX. Keyword syndrome descriptions with free-text reason for visit (chief complaint) search terms and diagnosis codes included in keyword syndromes for emergency department visits associated with Mental Health Conditions (MHCs) — National Syndromic Surveillance Program**

**Description:**

The purpose of these keyword syndromes is to identify visits among persons who experienced MHCs, including specific disorders, in emergency departments and ambulatory healthcare settings. These definitions use *International Classification of Diseases, Ninth Revision, Clinical Modification codes (ICD-9-CM)*, *International Classification of Diseases, Tenth Revision, Clinical Modification codes (ICD-10-CM)*, *Systematized Nomenclature of Medicine (SNOMED) codes*, and free text reason for visit (chief complaint terms).

Definitions for MHCs include visits with acute mental health crises (i.e., the sole or primary reason for the visit is only related to mental health) as well as visits where mental disorders are present (defined as coded in the discharge diagnosis or mentioned in the chief complaint text) but may not be the sole reason for the visit. Codes related to mental disorders that are non-specific to mental health, for example, related to substance use, developmental disabilities, or dementia, were excluded. Codes for MHCs were further classified into the categories based on previous literature and with expert judgement from a team of scientists with cross-cutting expertise in mental disorders – including a practicing psychiatrist – based on best alignment with the Diagnostic and Statistical Manual of Mental Disorders, version 5 (DSM-5). For individual disorder categories where the sample size in national syndromic surveillance data was too minimal to meaningfully include an individual keyword syndrome, codes were placed in the “Overall Mental Health Conditions” definition (e.g., reactive attachment disorder). Terms and codes that were non-specific and unable to differentiate between specific mental disorders (e.g., psychosis; hallucinations) were also included in the “Overall Mental Health Conditions” but not specific individual disorder syndromes to improve syndrome specificity.

Common misspellings of chief complaint terms were also included. Non-decimal versions of all discharge diagnosis codes were also included.

Definition	Chief Complaint Search Terms	Diagnosis Codes
<b>CDC Overall Mental Health Conditions v1</b>	Schizophrenia (include misspellings) Schizotypal (include misspellings) Schizoaffective (include misspellings) Grief (include misspellings) Grieve (include misspellings) Bereave (include misspellings) Psych Mental health Mental evaluation Mental problem Mentally Mental illness Reactive attachment Auditory hallucination Visual hallucination Hearing voice Evaluation hallucination History of hallucination Hallucinations patient Hallucinations unspecified Seeing thing Delusion (include misspellings) Paranoia (include misspellings) Trichotillomania Dissociative disorder Dissociative conversion Dissociative identity Dissociative and conversion Dissociative tendency	295.00; 295.01; 295.02; 295.03; 295.04; 295.10; 295.11; 295.12; 295.13; 295.14; 295.20; 295.21; 295.22; 295.23; 295.24; 295.30; 295.31; 295.32; 295.33; 295.34; 295.40; 295.41; 295.42; 295.43; 295.44; 295.50; 295.51; 295.52; 295.53; 295.54; 295.60; 295.61; 295.62; 295.63; 295.64; 295.70; 295.71; 295.72; 295.73; 295.74; 295.80; 295.81; 295.82; 295.83; 295.84; 295.90; 295.91; 295.92; 295.93; 295.94; 296.90; 296.99; 297.0; 297.1; 297.2; 297.3; 297.8; 297.9; 298.0; 298.1; 298.2; 298.3; 298.4; 298.8; 298.9; 300.10; 300.11; 300.12; 300.13; 399.14; 300.15; 300.81; 300.82; 300.89; 300.7; 307.80; 307.89; 300.9 648.40; 648.41, 648.42, 648.43; 648.44; V62.82  F20; F21; F22; F23; F25; F28; F29; F39; F44; F45; F48; F53.1; F54; F63.3; F93.8; F93.9; F94; F98.9; F99; Z63.4  413307004; 74732009; 231538003; 268664001; 48500005; 191667009; 41526007; 18193002; 224965009; 74506000; 58214004; 268617001; 64905009; 191526005; 68890003

	Dissociative episode Dissociative conversion Dissociative behavior Dissociative amnesia Dissociative attentive Experiencing dissociation Dissociative (when used with depress, depression, psych, dysthymic, anxiety, anxious, traumatic stress, PTSD, adjustment disorder, mental, attention deficit, bipolar, schizophrenia, schizoaffective, schizotypal – and associated misspellings of all terms)	
<b>CDC Depressive Disorders v1</b>	Depression Dysthymic Dysthymia Mood disorder Mood disturbance	296.20; 296.21; 296.22; 296.23; 296.24; 296.25; 296.30; 296.31; 296.32; 296.33; 296.34; 296.35; 300.4; 309.0; 309.1; 296.90; 296.99; 309.28  F32 (except F32.5); F33 (except F33.42); F34.1; F34.9; F43.21; F43.23; O90.6  35489007; 310497006; 370143000; 712823008; 57194009
<b>CDC Anxiety Disorders v1</b>	Anxiety (include misspellings) Anxious Panic Phobia	300.00; 300.01; 300.02; 300.09; 300.20; 300.21; 300.22; 300.23; 300.29; 313.0 309.24; 309.28  F40; F41; F43.22; F43.23; F93.0  197480006; 126943008; 21897009; 69479009; 109006; 61387006; 70997004; 191709001
<b>CDC Attention-Deficit/Hyperactivity Disorders v1</b>	Attention deficit Hyperactivity Attention problems	314.00, 314.01; 314.9; 314.2  F90 (include all in this series)  406506008 35253001
<b>CDC Trauma and Stressor-related Disorders v1</b>	Traumatic stress PTSD (including misspellings) Adjustment disorder Reaction to acute stress Acute stress reaction Acute stress crisis Acute stress eval Eval acute stress Acute stress behavior (including misspellings for behavior) Behavior acute stress Behavior acute stress Reaction to severe stress Severe stress reaction Severe stress crisis	308.0; 308.1; 308.2; 308.3; 308.4; 308.9; 309.81; 309.89; 309.9; 309.0; 309.1; 309.24; 309.28; 309.29; 309.3; 309.4  F43  67195008; 47505003; 17226007; 57194009; 271952001
<b>CDC Disruptive Behavioral and Impulse-Control v1</b>	Conduct disorder Oppositional defiant (with spelling mistakes for “defiant”)	309.3; 309.4; 312.00; 312.01; 312.02; 312.03; 312.10; 312.11; 312.12; 312.13; 312.20, 312.21; 312.22; 312.23; 312.4; 312.81; 312.82; 312.89;

	Antisocial personality Disturbance of conduct Impulse control disorder Explosive disorder	312.9; 312.30; 312.31; 312.39; 313.81; 314.2; 301.7  F43.24; F43.25; F91.0; F91.1; F91.2; F91.3; F91.8; F91.9; F63.81; F63.1; F63.2; F63.9; F63.0; F63.89; F60.2  54319003; 18941000; 430909002; 26665006
<b>CDC Bipolar Disorders v1</b>	Bipolar Manic Cyclothymic Mania Hypomania Hypermania	296.00; 296.01; 296.02; 296.03; 296.04; 296.05; 296.40; 296.41; 296.42; 296.43; 296.44; 296.45; 296.50; 296.51; 296.52; 296.53; 296.54; 296.55; 296.60; 296.61; 296.62; 296.63; 296.64; 296.65; 296.7 296.80; 296.81; 296.82; 296.89  F30.1; F30.2; F30.3; F30.8; F30.9; F31.0; F31.1; F31.2; F31.3; F31.4; F31.5; F31.6; F31.7 (only include: F31.70, F31.71, F31.73, F31.75, F31.77); F31.8; F31.9; F34.0  191627008; 371596008; 83225003; 231494001; 284513006; 268619003
<b>CDC Eating Disorders v1</b>	Pica Bulimia (including misspellings) Binge eating (including misspellings of binge) Binge-eating Eating disorder Rumination disorder Binging or purging Binging and purging Weight loss or anorexia Anorexia nervosa (including misspellings of anorexia) Anorexic (including misspellings of anorexic) Being treated for anorexia (including misspellings of anorexia) Treatment for (including misspellings of anorexia) Weight loss (including misspellings of weight; include when used with anorexia) Loss of weight (including misspellings of weight; include when used with anorexia) Weight loss (including misspellings of weight; include when used with anorexia) Loss of weight (including misspellings of weight; include when used with anorexia) Eating disorder Anorexia history (including misspellings of anorexia) History of anorexia (including misspellings of anorexia) History anorexia (including misspellings of anorexia) Mental anorexia (including misspellings of anorexia) Mental (when used with anorexia) Psych (when used with anorexia)	307.1; 307.50; 307.51; 307.52; 307.53; 307.54; 307.59  F50.00; F50.01; F50.02; F50.2; F50.8; F50.82; F50.89; F50.9; F98.21; F98.29; F98.3  72366004; 56882008; 7800400; 32721004
<b>CDC Tic Disorders v1</b>	Neurological tic Tic disorder Behavioral tic	307.20; 307.21; 307.22; 307.23  F95; G25.69

	Facial tic Face tic Tic like phenomenon Verbal tic Motor tic	568005; 5158005
<b>CDC Obsessive-Compulsive Disorders v1</b>	Obsessive compulsive Compulsive disorder	300.3 F42 191736004