

**Supplementary Table 2. Top 10 concurrent diagnoses by ICD-10 (International Classification of Diseases, 10th Revision) chapter among pediatric and adult patients with abnormal liver function tests presenting to the Emergency Department**

Chapter	Rank	Pediatric Code	Pediatric Diagnosis	Pediatric N	Pediatric %	Adult Code	Adult Diagnosis	Adult N	Adult %
Infectious	1	A09	Infectious gastroenteritis and colitis	497	15.77	A09	Infectious gastroenteritis and colitis	3225	20.9
Blood	1	D70	Other anemias	338	10.72	D64	Other anemias	353	2.29
Infectious	2	B34	Viral infection, unspecified	218	6.92	B17	Acute viral hepatitis	531	3.44
Malignant	1	C91	Lymphoid leukemia	201	6.38	C22	Malignant neoplasm of liver	113	0.73
Digestive	1	K75	Other inflammatory liver diseases	171	5.43	K29	Gastritis and duodenitis	2821	18.28
Digestive	2	K29	Gastritis and duodenitis	159	5.04	K21	GERD	1421	9.21
Respiratory	1	J20	Acute bronchitis	143	4.54	J18	Pneumonia	937	6.07
Infectious	3	A41	Sepsis	134	4.25	B18	Chronic viral hepatitis	255	1.65
Infectious	4	B17	Acute viral hepatitis	133	4.22	A04	Other bacterial intestinal infections	227	1.47
Genitourinary	1	N39	Other urinary system disorders	115	3.65	N10	Acute tubulo-interstitial nephritis	650	4.21
Respiratory	2	J18	Pneumonia	113	3.59	J20	Acute bronchitis	283	1.83
Endocrine	1	E83	Disorders of mineral metabolism	110	3.49	E78	Disorders of lipoprotein metabolism	1214	7.87
Digestive	3	K76	Other liver diseases	110	3.49	K76	Other liver diseases	934	6.05
Respiratory	3	J21	Acute bronchiolitis	107	3.39	J06	Acute upper respiratory infection	240	1.56
Respiratory	4	J06	Acute URI	92	2.92	J02	Acute pharyngitis	236	1.53
Genitourinary	2	N10	Acute tubulo-interstitial nephritis	91	2.89	N39	Other urinary system disorders	546	3.54
Infectious	5	A08	Viral intestinal infection	88	2.79	A41	Sepsis	205	1.33
Blood	2	D64	Other anemias	87	2.76	D69	Purpura and hemorrhagic conditions	197	1.28
Respiratory	5	J03	Acute tonsillitis	82	2.6	J90	Pleural effusion	229	1.48
Endocrine	2	E86	Volume depletion	81	2.57	E11	Type 2 diabetes mellitus	932	6.04
Respiratory	6	J02	Acute pharyngitis	81	2.57	J30	Allergic rhinitis	199	1.29
Malignant	2	C41	Malignant neoplasm of bone	81	2.57	C50	Malignant neoplasm of breast	104	0.67
Infectious	6	B27	Infectious mononucleosis	77	2.44	B15	Acute hepatitis A	204	1.32
Endocrine	3	E07	Other thyroid disorders	73	2.32	E87	Fluid and electrolyte disorders	755	4.89
Musculoskeletal	1	M30	Polyarthritis nodosa	73	2.32	M79	Other soft tissue disorders	467	3.03
Blood	3	D69	Purpura and hemorrhagic conditions	73	2.32	D50	Iron deficiency anemia	143	0.93
Respiratory	7	J10	Influenza	72	2.28	J03	Acute tonsillitis	193	1.25
Circulatory	1	I88	Nonspecific lymphadenitis	65	2.06	I10	Essential hypertension	1209	7.84
Genitourinary	3	N17	Acute renal failure	63	2	N20	Urinary calculus	505	3.27
Digestive	4	K21	GERD	62	1.97	K80	Cholelithiasis	871	5.65
Respiratory	8	J01	Acute sinusitis	61	1.94	J40	Bronchitis	190	1.23
Blood	4	D65	Disseminated intravascular coagulation	56	1.78	D70	Agranulocytosis	104	0.67
Infectious	7	B25	Cytomegaloviral disease	55	1.74	A75	Typhus fever	138	0.89
Respiratory	9	J30	Allergic rhinitis	54	1.71	J10	Influenza	181	1.17
Endocrine	4	E87	Fluid and electrolyte disorders	53	1.68	E07	Other thyroid disorders	648	4.2
Digestive	5	K59	Constipation	52	1.65	K70	Alcoholic liver disease	781	5.06
Infectious	8	B08	Other viral infections with skin lesions	52	1.65	A49	Bacterial infection, unspecified	123	0.8
Infectious	9	A04	Other bacterial intestinal infections	50	1.59	B34	Viral infection, unspecified	116	0.75
Circulatory	2	I10	Essential hypertension	48	1.52	I63	Cerebral infarction	349	2.26
Infectious	10	A49	Bacterial infection, unspecified	48	1.52	B96	Bacterial agents as cause of disease	100	0.65
Respiratory	10	J12	Viral pneumonia	47	1.49	J11	Influenza virus not identified	152	0.99
Musculoskeletal	2	M79	Soft tissue disorders	44	1.4	M62	Muscle disorders	405	2.63
Endocrine	5	E78	Lipoprotein metabolism disorders	39	1.24	E14	Unspecified diabetes mellitus	344	2.23
Blood	5	D76	Other specified diseases of blood	39	1.24	D63	Anemia in chronic disease	37	0.24
Malignant	3	C83	Non-Hodgkin lymphoma	36	1.14	C34	Malignant neoplasm of bronchus and lung	82	0.53
Malignant	4	C92	Myeloid leukemia	35	1.11	C16	Malignant neoplasm of stomach	78	0.51
Musculoskeletal	3	M62	Muscle disorders	34	1.08	M54	Dorsalgia	245	1.59
Blood	6	D59	Acquired hemolytic anemia	32	1.02	D72	Other white blood cell disorders	35	0.23
Digestive	6	K00	Developmental dental disorders	31	0.98	K75	Other inflammatory liver diseases	697	4.52
Digestive	7	K35	Acute appendicitis	31	0.98	K85	Acute pancreatitis	569	3.69
Endocrine	6	E66	Obesity	31	0.98	E55	Vitamin D deficiency	169	1.1
Endocrine	7	E03	Hypothyroidism	30	0.95	E03	Hypothyroidism	147	0.95
Malignant	5	C69	Malignant neoplasm of eye	30	0.95	C78	Secondary malignant neoplasm of respiratory organ	75	0.49
Digestive	8	K83	Other biliary tract diseases	29	0.92	K59	Constipation	539	3.49
Malignant	6	C74	Malignant neoplasm of adrenal gland	29	0.92	C25	Malignant neoplasm of pancreas	60	0.39
Blood	7	D61	Aplastic anemia	28	0.89	D61	Aplastic anemia	30	0.19
Endocrine	8	E55	Vitamin D deficiency	27	0.86	E05	Thyrotoxicosis	118	0.76
Malignant	7	C49	Malignant neoplasm of connective tissue	27	0.86	C79	Secondary malignant neoplasm of other sites	57	0.37
Malignant	8	C71	Malignant neoplasm of brain	27	0.86	C18	Malignant neoplasm of colon	47	0.3
Genitourinary	4	N30	Cystitis	25	0.79	N17	Acute renal failure	483	3.13
Digestive	9	K56	Intestinal obstruction	25	0.79	K71	Toxic liver disease	392	2.54
Digestive	10	K07	Dentofacial anomalies	23	0.73	K81	Cholecystitis	292	1.89
Nervous	1	G40	Epilepsy	23	0.73	G47	Sleep disorders	231	1.5
Blood	8	D50	Iron deficiency anemia	23	0.73	D62	Acute posthemorrhagic anemia	29	0.19
Musculoskeletal	4	M60	Myositis	21	0.67	M51	Other intervertebral disc disorders	220	1.43
Endocrine	9	E88	Other metabolic disorders	21	0.67	E86	Volume depletion	97	0.63
Genitourinary	5	N13	Obstructive uropathy	18	0.57	N31	Neuromuscular bladder dysfunction	188	1.22
Nervous	2	G03	Meningitis	17	0.54	G40	Epilepsy	199	1.29
Malignant	9	C22	Malignant neoplasm of liver	16	0.51	C24	Malignant neoplasm of biliary tract	47	0.3
Blood	9	D72	Other white blood cell disorders	16	0.51	D68	Other coagulation defects	22	0.14
Endocrine	10	E79	Purine metabolism disorders	15	0.48	E16	Other pancreatic disorders	93	0.6
Nervous	3	G93	Other disorders of brain	14	0.44	G44	Other headache syndromes	196	1.27
Circulatory	3	I51	Heart disease complications	13	0.41	I50	Heart failure	270	1.75
Circulatory	4	I82	Venous embolism and thrombosis	13	0.41	I61	Intracerebral hemorrhage	223	1.45
Nervous	4	G04	Encephalitis	13	0.41	G81	Hemiplegia	104	0.67
Malignant	10	C96	Other malignant neoplasms	12	0.38	C53	Malignant neoplasm of cervix uteri	35	0.23
Circulatory	5	I50	Heart failure	11	0.35	I20	Angina pectoris	208	1.35
Musculoskeletal	5	M86	Osteomyelitis	11	0.35	M10	Gout	132	0.86
Blood	10	D80	Immunodeficiency	11	0.35	D65	DIC	18	0.12
Circulatory	6	I15	Secondary hypertension	10	0.32	I48	Atrial fibrillation	207	1.34
Genitourinary	6	N18	Chronic kidney disease	10	0.32	N18	Chronic kidney disease	185	1.2
Nervous	5	G71	Myopathies	10	0.32	G45	Transient ischemic attacks	101	0.65
Circulatory	7	I31	Pericardial effusion	9	0.29	I21	Acute myocardial infarction	171	1.11
Circulatory	8	I49	Cardiac arrhythmias	9	0.29	I67	Other cerebrovascular diseases	151	0.98
Genitourinary	7	N20	Urinary calculus	8	0.25	N40	Prostatic hyperplasia	165	1.07
Genitourinary	8	N31	Neuromuscular bladder dysfunction	8	0.25	N30	Cystitis	153	0.99
Circulatory	9	I42	Cardiomyopathy	8	0.25	I60	Subarachnoid hemorrhage	117	0.76
Musculoskeletal	6	M81	Osteoporosis	8	0.25	M48	Other spondylopathies	95	0.62
Nervous	6	G41	Status epilepticus	8	0.25	G93	Other disorders of brain	94	0.61
Circulatory	10	I80	Phlebitis and thrombophlebitis	7	0.22	I25	Chronic ischemic heart disease	100	0.65
Nervous	7	G47	Sleep disorders	7	0.22	G43	Migraine	85	0.55
Musculoskeletal	7	M72	Fibroblastic disorders	7	0.22	M25	Joint disorders	77	0.5
Genitourinary	9	N28	Other kidney disorders	7	0.22	N19	Unspecified kidney failure	77	0.5
Genitourinary	10	N11	Chronic tubulo-interstitial nephritis	6	0.19	N28	Other kidney disorders	73	0.47
Nervous	8	G44	Other headache syndromes	6	0.19	G82	Paraplegia	58	0.38
Nervous	9	G91	Hydrocephalus	6	0.19	G91	Hydrocephalus	48	0.31
Musculoskeletal	8	M31	Other necrotizing vasculopathies	5	0.16	M50	Cervical disc disorders	60	0.39
Musculoskeletal	9	M54	Dorsalgia	5	0.16	M81	Osteoporosis	55	0.36
Musculoskeletal	10	M08	Juvenile arthritis	4	0.13	M75	Shoulder lesions	50	0.32
Nervous	10	G62	Polyneuropathy	4	0.13	G63	Polyneuropathy in diseases	46	0.3