

AGE	BACTERIAL CAUSES	VIRAL CAUSES	OTHER
0 to 28 days old	Group B streptococcus	HSV	Bundling*
	<i>Listeria monocytogenes</i>	Varicella	Environmental
	<i>Escherichia coli</i>	Enteroviruses	
	<i>Chlamydia trachomatis</i>	RSV	
	<i>Neisseria gonorrhoeae</i>	Influenza	
1 to 3 months old	<i>Haemophilus influenzae</i>	Varicella	
	<i>Streptococcus pneumoniae</i>	Enteroviruses	Environmental
	<i>Neisseria meningitidis</i>	RSV	
	<i>E. coli</i>	Influenza	
3 to 36 months old	<i>S. pneumoniae</i>	Varicella	Leukemia
	<i>N. meningitidis</i>	Enteroviruses	Lymphoma
	<i>E. coli</i>	RSV	Neuroblastoma
		Influenza	Wilms' tumor
		Mononucleosis	
		Roseola	
		Adenovirus	
		Norwalk virus	
	Coxsackievirus		

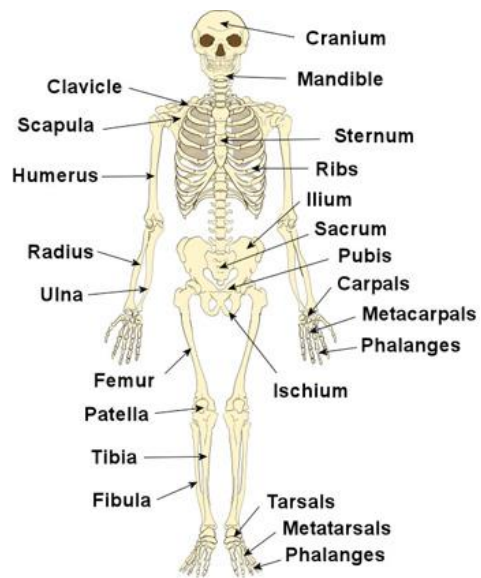
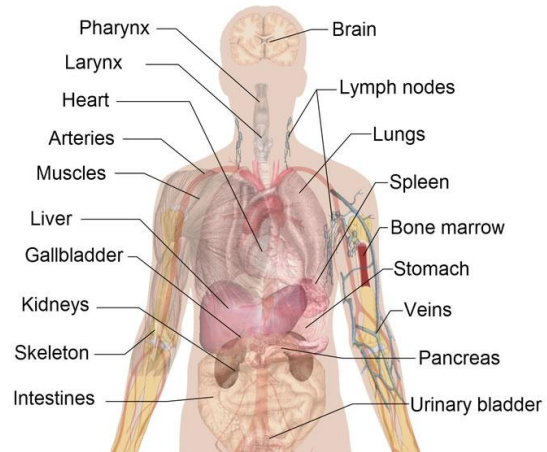
## Empiric Antibiotics

Age	Common Pathogen	Empiric Treatment
Neonate (</= 28 days)	Common: GBS, Strep, E. Coli	<ul style="list-style-type: none"> <li>• Ampicillin AND Cefotaxime OR Gentamicin</li> <li>• Add acyclovir when indicated</li> <li>• Add vancomycin when indicated</li> </ul>
Infant (28-60 days)	Common: GBS, E. Coli, S. pneumonia, H. influenza, N. meningitides, S. aureus	<ul style="list-style-type: none"> <li>• Cefotaxime OR ceftriaxone</li> <li>• Add ampicillin when coverage for Enterococcus or Listeria monocytogenes infection is indicated</li> <li>• Add vancomycin when indicated</li> <li>• Add gentamicin when broader coverage is indicated</li> <li>• Add acyclovir when indicated</li> </ul>
Infant (61-90 days)	Common: S. pneumonia, H. influenza, N. meningitidis	<ul style="list-style-type: none"> <li>• Ceftriaxone OR cefotaxime</li> <li>• Add vancomycin when indicated</li> </ul>

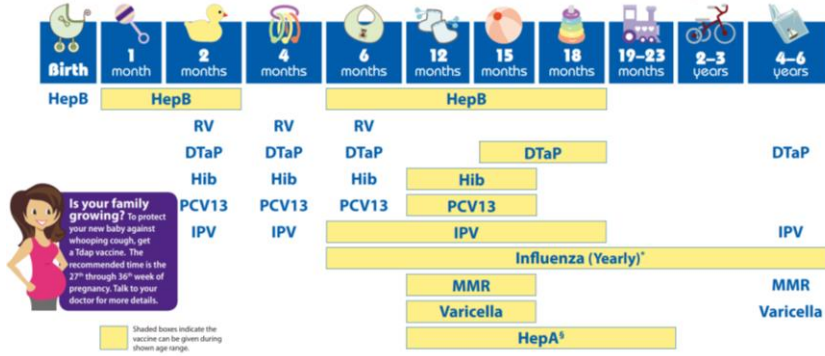
<b>CMP Test</b>	<b>Reference Range &amp; Unit</b>
Glucose Random	65 – 100 mg/dL
Blood Urea Nitrogen	5 – 18 mg/dL
Creatinine	0.5 – 1.0 mg/dL
Sodium	136 – 143 mmol/L
Potassium	4.2 – 5.4 mmol / L
Chloride	96 – 107 mmol / L
CO2	20 – 29 mmol/L
Anion Gap	5 – 14 mmol/L
Total Calcium	8.4 – 10.2 mg/dL
Total Protein	6.4 – 8.2 g/dL
Albumin	3.4 – 5.0 g/dL
Globulin	2.3 – 3.9 g/dL
Albumin/Globulin Ratio	1.2 – 2.2
AST	25 – 75 U/L
ALT	9 – 52 U/L
Alkaline Phosphatase	117 – 322 U/L
Total Bilirubin	0.2 – 1.3 mg/dL

<b>Test</b>	<b>Reference Range</b>
Procalcitonin	<0.15 ng/L

## Human anatomy



## 2019 Recommended Immunizations for Children from Birth Through 6 Years Old



### Talk to your child's doctor or nurse about the vaccines recommended for their age.

	Flu Influenza	Tdap Tetanus, diphtheria, pertussis	HPV Human papillomavirus	Meningococcal		Pneumococcal	Hepatitis B	Hepatitis A	Polio	MMR Measles, mumps, rubella	Chickenpox Varicella
				MenACWY	MenB						
7-8 Years	Shaded	Shaded		Shaded		Shaded	Shaded	Shaded	Shaded	Shaded	Shaded
9-10 Years	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded
11-12 Years	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded
13-15 Years	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded
16-18 Years	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded
<b>More Information:</b>	Everyone 6 months and older should get a flu vaccine every year.	All 11- through 12- year olds should get one shot of Tdap.	All 11- through 12- year olds should get a 2-shot series of HPV vaccine. A 3-shot series is needed for those with weakened immune systems and those who start the series at 15 years or older.	All 11- through 12- year olds should get one shot of meningococcal conjugate (MenACWY). A booster shot is recommended at age 16.	Teens 16- 18 years old may be vaccinated with a serogroup B meningococcal (MenB) vaccine.						

These shaded boxes indicate when the vaccine is recommended for all children unless your doctor tells you that your child cannot safely receive the vaccine.

These shaded boxes indicate the vaccine should be given if a child is catching up on missed vaccines.

These shaded boxes indicate the vaccine is recommended for children with certain health or lifestyle conditions that put them at an increased risk for serious diseases. See vaccine-specific recommendations at [www.cdc.gov/vaccines/hcp/acip-recs/](http://www.cdc.gov/vaccines/hcp/acip-recs/).

This shaded box indicates children not at increased risk may get the vaccine if they wish after speaking to a provider.



U.S. Department of Health and Human Services  
Centers for Disease Control and Prevention

American Academy of Pediatrics  
DEDICATED TO THE HEALTH OF ALL CHILDREN™



PEDIATRIC DOSING GUIDELINES - ANALGESICS / SEDATIVES		
DRUG	DOSE	INTERVAL (hr)
Acetaminophen	10 - 15 mg/kg/dose (Max: < 2 years: 60 mg/kg/day; ≥ 2 years: 75 mg/kg/day Max: 4 grams/day)	Q4-6
Diazepam	(PO) 0.12 - 0.8 mg/kg/day (Max 10 mg/dose) (IV) 0.04 - 0.3 mg/kg/dose	Q6-8 Q6-12
Fentanyl	1 - 12 yo: 1 - 4 mcg/kg/dose > 12 yo: 0.5 - 1 mcg/kg/dose	Q2-4 Q1-2
Hydrocodone/ acetaminophen	0.05 - 0.2 mg/kg/dose (Elixir: 0.5 mg hydrocodone/33.4 mg acetaminophen per mL) (Tablet: 5 mg hydrocodone/325 mg acetaminophen)	Q3-4
Hydromorphone	(PO) 0.03 - 0.08 mg/kg/dose (IV) 0.01 mg/kg/dose	Q4-6 Q4-6
Ibuprofen	5 - 10 mg/kg/dose (Max: 40mg/kg/day, 400 mg/dose) (typically avoided in < 6 months)	Q6-8
Ketorolac	0.5 - 1 mg/kg/dose (Max: 30mg/dose, 120 mg/day; Max: 5 days)	Q6-8
Lorazepam	(PO/IV): 0.025 - 0.1 mg/kg/dose (Max: 2 mg)	Q4-6
Midazolam	(PO) 0.25 - 0.5 mg/kg/dose (Max: 20 mg) (IV) 0.025 - 0.1 mg/kg/dose (Max: 2 mg) (Intranasal) 0.2 - 0.3 mg/kg/dose (Max: 10 mg)	PRN PRN PRN
Morphine	(IV) 0.05 - 0.2 mg/kg/dose (Max: 2 - 4 mg) (PO) 0.2 - 0.5 mg/kg/dose	Q2-4 Q4-6
Naloxone	Complete Reversal: 100 mcg/kg/dose (Max: 2 mg) Over sedation: 5 - 10 mcg/kg Itching with Narcotics: 0.25 - 2 mcg/kg/hr (use lowest effective dose)	PRN PRN
Oxycodone	0.05 - 0.2 mg/kg/dose (Liquid: 1 mg/ml oxycodone) (Percocet tab: 5 mg oxycodone/325 mg acetaminophen; Percocet liquid: 1 mg oxycodone/65 mg acetaminophen/mL)	Q4-6

\*\*Special Liquid Formulation, please allow 24 hours for preparation

**Acetaminophen:** 10 mg/kg to 15 mg/kg Q4-6 hrs (160 mg/5mL)

**Ibuprofen:** 10 mg/kg Q6 hrs (100 mg/5 mL)