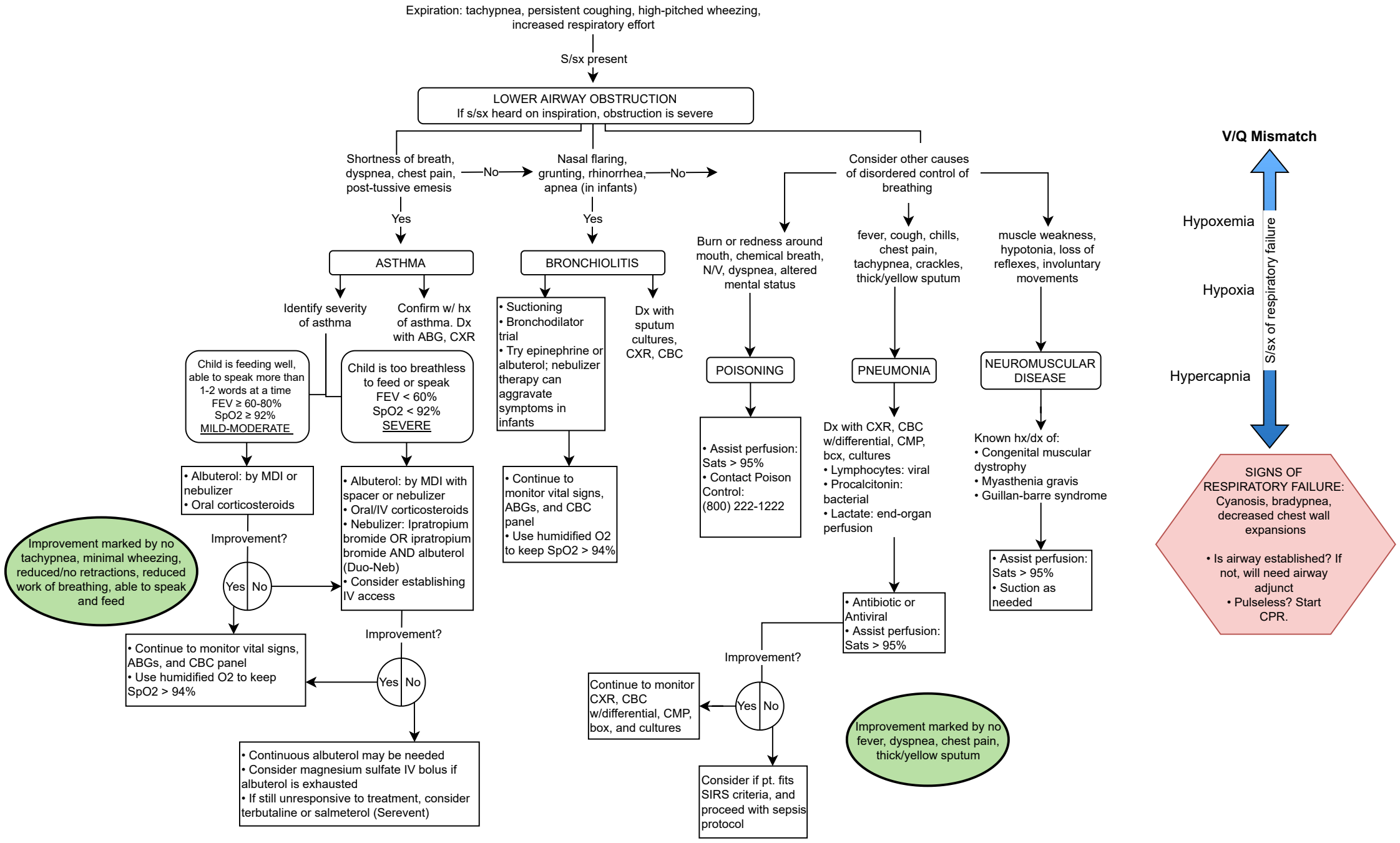
Expiration: tachypnea, persistent coughing, high-pitched wheezing, increased respiratory effort
S/sx present
LOWER AIRWAY OBSTRUCTION
If s/sx heard on inspiration, obstruction is severe
Shortness of breath, dyspnea, chest pain, post-tussive emesis
No
Nasal flaring, grunting, rhinorrhea, apnea (in infants)
No
Consider other causes of disordered control of breathing
Yes
Yes
ASTHMA
BRONCHIOLITIS
Identify severity of asthma
Confirm w/ hx of asthma. Dx with ABG, CXR
Child is feeding well, able to speak more than 1-2 words at a time
FEV ≥ 60-80%
SpO2 ≥ 92%
MILD-MODERATE
Child is too breathless to feed or speak
FEV < 60%
SpO2 < 92%
SEVERE
• Albuterol: by MDI or nebulizer
• Oral corticosteroids
Improvement?
Yes
No
Improvement marked by no tachypnea, minimal wheezing, reduced/no retractions, reduced work of breathing, able to speak and feed
• Continue to monitor vital signs, ABGs, and CBC panel
• Use humidified O2 to keep SpO2 > 94%
• Albuterol: by MDI with spacer or nebulizer
• Oral/IV corticosteroids
• Nebulizer: Ipratropium bromide OR ipratropium bromide AND albuterol (Duo-Neb)
• Consider establishing IV access
Improvement?
Yes
No
• Continuous albuterol may be needed
• Consider magnesium sulfate IV bolus if albuterol is exhausted
• If still unresponsive to treatment, consider terbutaline or salmeterol (Serevent)
• Suctioning
• Bronchodilator trial
• Try epinephrine or albuterol; nebulizer therapy can aggravate symptoms in infants
Dx with sputum cultures, CXR, CBC
• Continue to monitor vital signs, ABGs, and CBC panel
• Use humidified O2 to keep SpO2 > 94%
Burn or redness around mouth, chemical breath, N/V, dyspnea, altered mental status
fever, cough, chills, chest pain, tachypnea, crackles, thick/yellow sputum
muscle weakness, hypotonia, loss of reflexes, involuntary movements
POISONING
PNEUMONIA
NEUROMUSCULAR DISEASE
• Assist perfusion: Sats > 95%
• Contact Poison Control: (800) 222-1222
Dx with CXR, CBC w/differential, CMP, bcx, cultures
• Lymphocytes: viral
• Procalcitonin: bacterial
• Lactate: end-organ perfusion
Known hx/dx of:
• Congenital muscular dystrophy
• Myasthenia gravis
• Guillan-barre syndrome
• Assist perfusion: Sats > 95%
• Suction as needed
• Antibiotic or Antiviral
• Assist perfusion: Sats > 95%
Improvement?
Yes
No
Continue to monitor CXR, CBC w/differential, CMP, box, and cultures
Consider if pt. fits SIRS criteria, and proceed with sepsis protocol
Improvement marked by no fever, dyspnea, chest pain, thick/yellow sputum
V/Q Mismatch
Hypoxemia
Hypoxia
Hypercapnia
S/sx of respiratory failure
SIGNS OF RESPIRATORY FAILURE: Cyanosis, bradypnea, decreased chest wall expansions
• Is airway established? If not, will need airway adjunct
• Pulseless? Start CPR.