

PEDS RESP GAMEDAY

Facilitator Script

2026 Fall CME

This whole session runs off this one script and a single one-page Team Reference Card (one copy per team). There's no projector, no slides, and nothing for teams to fill in — everything is read aloud and answered out loud.

What You Need

- This script — one copy, for you (the facilitator). Read from paper or a phone/tablet, whichever is easiest — it's your own notes, not something shown to the room.
- Team Reference Card — one copy per team. It has the PRAM scoring table, and the 5 Croup Crossroads calls.

Run of Show — 45 Minutes Total

Time	Segment	Format
20 min	Pathology Match-Up	18 quick ID clues (1 pt) + 10 bonus “why” questions (2 pts), shuffled together
15 min	PRAM Slam	Teams calculate PRAM + treatment
10 min	Croup Crossroads	Teams call out one of 5 treatment calls

1. Pathology Match-Up (~20min)

SAY: *"This round has two kinds of items, shuffled together. Most are quick ID clues — I'll read a short clue, you call out which of six things it is: Croup, Asthma, Bronchiolitis, Foreign Body, Epiglottitis, or Anaphylaxis. A few are bonus 'why' questions — the pathology is already named, so I want the mechanism."*

Read each item, pause for the call-out or huddle, then read the full answer out loud regardless of whether they got it right. Quick-ID items are marked (1 pt); bonus items are marked (2 pts).

Quick ID 1

READ ALOUD: *Barky, seal-like cough with stridor that's worse overnight.*

ANSWER: Croup

Classic story: fine at bedtime, barky and stridorous overnight.

Quick ID 2

READ ALOUD: *5-month-old with a 2-day cold, now wheezing and crackly, feeding less.*

ANSWER: Bronchiolitis

Infant + viral prodrome + wheeze/crackles. Under 2, think bronchiolitis first.

Quick ID 3

READ ALOUD: *School-age child, biphasic wheeze, long expiratory phase, known atopic history.*

ANSWER: Asthma / Bronchoconstriction

Lower airway, chronic + episodic, reversible with a bronchodilator.

Quick ID 4

READ ALOUD: *High fever, drooling, tripod position, refuses to lie flat.*

ANSWER: Epiglottitis

Toxic-looking, not barky — hands off the airway.

The Why Behind It 1

READ ALOUD: *Why do we see croup in kids, but essentially never in adults?*

ANSWER: Two things stack together. First, anatomy: a child's airway is narrowest at the subglottic region, not at the vocal cords like in adults, and it's already smaller to start with. Second, physiology, Poiseuille's law. Resistance is proportional to 1 divided by radius to the fourth power. So the same small amount of viral airway edema that an adult barely notices causes a massive jump in resistance in an already-narrow pediatric airway. *1 mm of airway edema leads to a 75% decrease in cross-sectional area (44% in adults), 16x more resistance to laminar flow (3x in adults), and 32x more resistance to turbulent airflow (5x in adults).* Small changes, disproportionate impact.

Quick ID 5

READ ALOUD: *Sudden coughing fit while eating, now a unilateral wheeze.*

ANSWER: Foreign body aspiration

Asymmetric findings + a choking history point away from a symmetric illness. Always consider alternative differentials. Get a good incident history.

Quick ID 6

READ ALOUD: *Stridor or wheeze plus hives, vomiting, and a known allergen exposure.*

ANSWER: Anaphylaxis

Can look upper or lower airway — doesn't matter, the treatment is the same.

Quick ID 7

READ ALOUD: *Nasal passages account for ~50% of total airway resistance in infants — suctioning can meaningfully ease distress and improve feeding.*

ANSWER: Bronchiolitis

That 50% figure is why gentle nasal suctioning is such a high-value move in infants — clear the nose, meaningfully cut total airway resistance.

The Why Behind It 2

READ ALOUD: *Why does bronchiolitis hit infants so much harder than a typical cold hits an adult?*

ANSWER: It's a viral infection of the upper and lower airway, and nasal passages account for about 50% of total airway resistance in infants. A blocked nose in an infant is a much bigger deal than in an adult — infants are obligate nasal breathers and can't clear their own nose. A blocked nose also forces a choice between breathing and feeding — they'll pick breathing, which is fine right up until they get dehydrated.

Quick ID 8

READ ALOUD: *Was wheezing loudly ten minutes ago; now the chest is quiet and he's dozing off.*

ANSWER: Asthma / Bronchoconstriction

Silent chest = no air moving to make the sound, not improvement. Pre-arrest finding.

Quick ID 9

READ ALOUD: *History of a choking episode — hands-off approach, rapid transport.*

ANSWER: Foreign body aspiration

This is an airway-obstruction problem, not a medication problem.

Quick ID 10

READ ALOUD: *Multi-system: respiratory + GI, +/- cardiovascular.*

ANSWER: Anaphylaxis

Defined by systems involved, not just skin findings — you don't need hives.

The Why Behind It 3

READ ALOUD: *In severe croup, why do we give epi before dex, not the other way around?*

ANSWER: Speed and safety. Epi works in minutes; dex takes longer to kick in. Nebulized epi also delivers oxygen at the same time. And if the child is working that hard to breathe, giving an oral med first is an aspiration risk — plus epi's side effects can make them vomit, and you don't want them vomiting right after swallowing the dex.

Quick ID 11

READ ALOUD: *Under 6 months old — there's essentially no beta-agonist receptor to bronchodilate yet.*

ANSWER: Bronchiolitis

Supportive care is the cornerstone of treatment. Supplemental O2 is only required if sats are persistently <90% while awake. There is no role for salbutamol, steroids, or antibiotics. This is not a bronchoconstrictive disease.

Quick ID 12

READ ALOUD: *Toddler is quiet at rest, but the stridor comes right back the moment he's upset.*

ANSWER: Croup

Stridor at rest vs. only with agitation is the line that decides if epi is even on the table.

Quick ID 13

READ ALOUD: *Symptoms started right after a soccer game, on top of a 3-day cold.*

ANSWER: Asthma / Bronchoconstriction

Exercise + viral illness are two of the most common triggers.

The Why Behind It 4

READ ALOUD: *What are the three underlying pathological processes in an asthma exacerbation?*

ANSWER: Increased mucus production, bronchial smooth muscle spasm, and airway hyperreactivity to a trigger (usually viral URTI, infection, environmental, exercise, cold weather). It's a chronic, episodic, reversible process — reversible being the key word, since that's what makes it respond to a bronchodilator.

Quick ID 14

READ ALOUD: *Don't put anything near this airway — including a tongue depressor.*

ANSWER: Epiglottitis/Foreign Body

Agitation or an oropharyngeal exam can turn partial obstruction into complete obstruction.

Quick ID 15

READ ALOUD: *Bronchodilators won't touch this one.*

ANSWER: Many pathologies

The Why Behind It 5

READ ALOUD: *Why do we maintain a hands-off approach for a child with a suspected foreign body?*

ANSWER: Kids have powerful protective reflexes — gagging, coughing, forceful inhalation and exhalation — that are already working to move the object out or further down. Interfering can dislodge it somewhere worse. It's also genuinely hard to tell if something is still lodged, so never leave a child home with a choking history even if they look better, and always try to figure out what the object was — food, a toy piece, and so on.

Quick ID 16

READ ALOUD: *The answer is IM epinephrine no matter which airway sound you heard.*

ANSWER: Anaphylaxis

Don't get hung up on upper-vs-lower here; treat the syndrome, IM epi.

The Why Behind It 6 of 10 (2 pts)

READ ALOUD: *For croup, why do we give epi and not ventolin? Why do we give it nebulized and not IM?*

ANSWER: Epi is the most powerful beta-2 agonist there is, so like salbutamol it relaxes smooth muscle — that's why it also helps bronchoconstriction.

But in croup, epi's real job is vasoconstriction: it shrinks the swollen tissue narrowing the airway, and is topic directly on the site (which is why we go neb).

Salbutamol has no alpha effect, so no vasoconstriction — it won't shrink the edema, and its beta-2 vasodilation could theoretically make it worse. There's a Bernoulli's-principle wrinkle too: bronchodilation speeds up airflow through the narrowed upper airway, which can drop the pressure that's helping to stent it open.

The Why Behind It 7

READ ALOUD: *What's the danger in intubating a severe asthma exacerbation?*

ANSWER: Three big risks. Poor ventilation — you can't match the expiratory time this degree of lower airway obstruction needs, so CO₂ and acidosis build up. Hyperinflation — progressive gas trapping that can produce a pneumothorax or pneumomediastinum; be ready to needle-decompress. And impaired cardiac output — positive pressure ventilation adds to already-high intrathoracic pressure, crushing preload, with a real risk of cardiac arrest.

The Why Behind It 8

READ ALOUD: *A patient's been using their puffer with no improvement. What are you troubleshooting?*

ANSWER: Three things. Delivery — without a spacer, most of the dose just sticks to the mouth and throat. Time — salbutamol can take 5 to 15 minutes to kick in, so if they called right away it may just not have worked yet. And dose — MDIs are only good for 200 actuations; a canister that's been in use a while may be firing propellant with little or no medication left.

The Why Behind It 9

READ ALOUD: *Why do we use epi in anaphylaxis?*

ANSWER: Epinephrine is a mixed α 1- and β -receptor agent. The α -receptor activation reduces mucosal edema and treats hypotension, β 1-receptor stimulation increases heart rate and myocardial contractility, and β 2-receptor stimulation provides bronchodilation and limits further inflammatory mediator release, stopping the allergic reaction from progressing further.

The Why Behind It 10

READ ALOUD : *Is stridor inspiratory or expiratory? Why?*

ANSWER: Stridor is most inspiratory due to pressures exerted during inspiration. Stridor is increased turbulent flow through a partially obstructed airway. As air is forced through a narrow airway, there's an increase in speed and a decrease in pressure → a decrease in lateral pressure against the walls of an airway → the walls vibrating → stridor

The reason this doesn't happen with a lower airway obstruction as the negative pressure created by the chest wall during inspiration pulls apart the airway walls, so the narrowing generally doesn't worsen during inspiration in a lower airway obstruction

2. PRAM Slam (~15 min)

PRAM (0–12): suprasternal indrawing (0/2) + scalene contractions (0/2) + wheeze (0–3) + air entry (0–3) + SpO₂ (0–2). Mild 1–3, Moderate 4–7, Severe 8–12. A silent chest / minimal air entry scores the MAXIMUM (3) for wheeze, not zero — it's also printed on their card.

Case 1 of 4

READ ALOUD: 6-year-old, known asthmatic. Talking in full sentences. No suprasternal or scalene retractions. Wheeze heard on expiration only. Air entry decreased at the bases. SpO₂ 96% on room air.

PRAM: Suprasternal 0 · Scalene 0 · Wheeze 1 · Air entry 1 · SpO₂ 0 → Total 2 (Mild)

TREATMENT: Salbutamol MDI + spacer, 600 mcg, up to 3 doses q5–15min PRN. Dexamethasone 0.5 mg/kg PO (max 8 mg) = 8 mg (0.8 mL).

TEACHING NOTE: Mild PRAM, straightforward first-line therapy — no need to reach for a nebulizer or epi here.

Case 2 of 4

READ ALOUD: 3-year-old, fever 39.4°C — your service has a febrile respiratory illness advisory in effect this week. Suprasternal indrawing present, no scalene involvement. Wheeze heard on both inspiration and expiration. Air entry decreased at the bases. SpO₂ 93%.

PRAM: Suprasternal 2 · Scalene 0 · Wheeze 2 · Air entry 1 · SpO2 1 → Total 6 (Moderate)

TREATMENT: Salbutamol 600 mcg by MDI + spacer — NOT nebulized (fever/outbreak makes nebulization contraindicated). Dexamethasone 0.5 mg/kg PO (max 8 mg). 6 mg (0.6 mL)

TEACHING NOTE: Same moderate picture as any other kid — but the fever changes your delivery device, not your drugs. MDI + spacer, not the neb.

Case 3 of 4

READ ALOUD: 8-year-old, known asthmatic. Speaking in short phrases only. Suprasternal indrawing present. Wheeze audible on inspiration and expiration. Air entry widespread decrease. SpO2 93%.

PRAM: Suprasternal 2 · Scalene 0 · Wheeze 2 · Air entry 2 · SpO2 1 → Total 7 (top of Moderate)

TREATMENT: Salbutamol 800 mcg MDI+spacer (or 5 mg NEB if also needing supplemental O2), up to 3 doses q5–15min. Dexamethasone 0.5 mg/kg PO (max 8 mg). 8 mg (0.8 mL). Reassess after every dose.

TEACHING NOTE: A PRAM of 7 sits right at the moderate/severe line — treat, reassess in real time, don't be surprised if this one needs all three salbutamol doses.

Case 4 of 4

READ ALOUD: 4-year-old. Parents say he was wheezing loudly ten minutes ago; now he's quiet and drowsy. On exam: suprasternal and scalene retractions both present, chest is silent with minimal air movement, pale, SpO2 88%.

PRAM: Suprasternal 2 · Scalene 2 · Wheeze 3 (silent chest / minimal air entry — the MAXIMUM, not zero) · Air entry 3 · SpO2 2 → Total 12 (Severe)

TREATMENT: Impending respiratory failure regardless of the number. Prepare for BVM, high-flow O2, call for backup/ALS, priority transport. IM epinephrine only if he becomes apneic and requires BVM ventilation (0.01 mg/kg, max 0.5 mg, given first, simultaneous with ventilation).

TEACHING NOTE: Quiet ≠ better.

3. Croup Crossroads (~10 min)

Case 1 of 8

READ ALOUD: 18-month-old. Barky cough. Stridor only when he's upset during your exam; calm and quiet at rest. RR normal for age. SpO2 99%.

CALL: Dex Only

TEACHING NOTE: No stridor at rest → the epinephrine directive isn't met. Dexamethasone is appropriate for any mild/moderate/severe croup regardless of whether epi is given.

Case 2 of 8

READ ALOUD: 3-year-old. Audible stridor at rest, moderate indrawing, HR 130, SpO2 95%.

CALL: Epi + Dex

TEACHING NOTE: Textbook epi trigger: stridor AT REST, not just when he's upset — plus age and heart rate both fit the directive.

Case 3 of 8

READ ALOUD: 9-year-old. Barky cough, stridor at rest, HR 140.

CALL: Outside Directive — Consult

TEACHING NOTE: Both the epi and dex Croup Directives are written for ≥6 months to <8 years. Pause, reconsider the differential, consult base hospital.

Case 4 of 8

READ ALOUD: 2-year-old. Stridor at rest, HR 150. Urgent care gave him a dose of oral steroids yesterday for an unrelated rash.

CALL: Epi Only — Dex Contraindicated

TEACHING NOTE: Stridor at rest + age + HR all meet the epinephrine directive. But steroids within the last 48 hours is an explicit contraindication to dex.

Case 5 of 8

READ ALOUD: 14-month-old. Fever 39.8°C, drooling, tripod position, refuses to lie flat, muffled voice, no barky cough.

CALL: Stop — Not Croup

TEACHING NOTE: Toxic-looking, drooling, no cough — this is the epiglottitis pattern. Hands off the oropharynx, blow-by O2, calm environment, rapid transport.

Case 6 of 8

READ ALOUD: 4-year-old. Barky cough, stridor at rest, agitated, HR 215.

CALL: Couple options here

TEACHING NOTE: Based on the HR, it would not be unreasonable to patch for orders. Having said that, slow it down. Try calming measures, let the child relax with their parent and maintain a hands off approach. If the HR comes down, you can now treat. At the end of the day however, this child should be given treatment. At the very least, they can receive dex

Case 7 of 8

READ ALOUD: 7-month-old, 8 kg. Stridor at rest, HR 170.

CALL: Epi + Dex

TEACHING NOTE: <10 kg → 2.5 mg nebulized epi (1:1,000); dex 0.5 mg/kg × 8 kg = 4 mg PO.

Case 8 of 8

READ ALOUD: 3-year-old got nebulized epi from a first-responder crew 25 minutes ago for stridor at rest; now calm, no stridor at rest, only mild stridor when he cries. Dex has not yet been given.

CALL: Dex Only (epi already given)

TEACHING NOTE: The epinephrine directive is a single dose. Give dex now if it hasn't been given. Transport and monitor: rebound stridor is expected.