

2024 NCSRC Student Sputum Bowl Competition

(All information is subject to change. Notice of change will be posted as soon as possible.)

Sputum Bowl General Information:

The primary objective of the Sputum Bowl is to stimulate interest in the current knowledge and practices of respiratory care. The competition shall be held in a spirit of professionalism and good sportsmanship. There are no losers in this contest. All should gain from this experience by developing a greater understanding of respiratory care and themselves.

The NCSRC will hold a Student Sputum Bowl competition similar to the traditional AARC Student Sputum Bowl contest. Each entry level college respiratory education program is encouraged to send a Student Sputum Bowl team. All team members must be AARC/NCSRC members. Due to the physical and time limitations for a double elimination format, we must limit participation to a select number of teams who are registered and eligible in a first come first served fashion. Initially each college may only submit one team. All colleges will have until Friday August 30th to submit a first team application. Should spots be available after this date, notification will go out to call for second team applications. Any team missing a deadline for the roster will be removed from the competition. This makes complying with the deadlines very important. PLEASE carefully read the rules and information below. Each team is responsible for understanding and complying with the new rules.

Please communicate any needs, if necessary, to the NCSRC Sputum Bowl Task Force Chair.

NCSRC Sputum Bowl Task Force Chair:

Dustin Smith

email: dsmi423@charlotte.edu

NCSRC 2024 Student Sputum Bowl Important Dates:

- Applications and Rosters for Student Teams due Friday August 30th:
(<https://www.ncsrc.org/2024/04/30/2024-ncsrc-symposium-student-sputum-bowl-competition/>)
 - AARC Membership is required for all team members
 - All teams are asked to submit questions with application, **not required** (See Appendix B)
 - Team Name Competition
 - Be creative! Best team name will earn a prize!
- If available, colleges can submit a second team (*Date TBD*)
- Students must pay a student entry fee to the Symposium. If not registered for the Symposium, students cannot participate in the Student Sputum Bowl.
- AARC/NCSRC Membership must be confirmed prior to competition date on September 25, 2024
- All participating members must be present for a brief meeting reviewing the competition 45 minutes prior to competition start time
- Sputum Bowl Competition Date/Time: September 25, 2024 7:00pm (*Date and time subject to change*)

Sputum Bowl Rules:

Please review the rules carefully, see below.

Make certain your team members are aware of all rules.

Note: The 2024 Student Sputum Bowl Rules and all required forms can be located on the NCSRC website: (<https://www.ncsrc.org/2024/04/30/2024-ncsrc-symposium-student-sputum-bowl-competition/>)

If the winning team wishes to compete at the National Congress Student Sputum Bowl, the NCSRC will pay the AARC Sputum Bowl registration fee and provide additional funding, as outlined in the budget, provided that teams submit their interest prior to the AARC Sputum Bowl deadline date.

General Rules:

- Recording devices of any kind are prohibited during contests.
- There will be no adjustments to the game schedules.
 - If team members anticipate a potential conflict with other commitments they should plan accordingly and ensure at least one member is available to compete.
 - If no team members are present, their game is forfeited.
- All decisions by the judges are final. No challenges will be accepted based on a prior ruling by the judges.
- GAME CONDUCT: No alcoholic beverages of any kind are permitted at the competition table or in the competition area during game play by any participants; including student competitors, judges, moderators, etc.

Competition Rules:

1. The moderator shall signal the beginning of each game. The moderator asks from a list of pre-selected toss-up questions.
2. Any team member may buzz in to answer toss-up questions. If neither team responds to a question within ten seconds, the question will be set aside and the game continues.
 - The element of “**Risk/ Reward**” will exist throughout the entire game. If a team buzzes in to answer **before** the moderator has finished reading the question, the moderator will stop at that point in the question and indicate to that team that they are “**At Risk**”. The team then has ten (10) seconds to begin an answer. Team members have the liberty to confer during this time period. The moderator will judge the first answer given by any team as to its correctness and indicate whether correct or incorrect to the scorekeeper. If the answer is incorrect, a point will be deducted from their score. The moderator will then turn to the opposing team, re-read the question, and give that team ten (10) seconds to begin an answer. If that team is correct, they score a point. If they are incorrect, a point will not be deducted from their score.
 - A team will never be “At Risk” if they respond to a question **after** the moderator has finished reading it, except in the “Bonus” period (see details below).
3. The team that is acknowledged first to buzz has 10 seconds to begin an answer.
4. If the answer is correct, that team will be rewarded one point. If incorrect, a point will **not** be deducted and the other team has an opportunity to answer.
 - Lifeline Use-“Call Your Posse”: (“*Posse*” will be the team alternate. Alternate member must be identified prior to the start of competition during the

pre-game start meeting. If an alternative is unavailable, any student can be used as a "Posse", provided they are an AARC/NCSRC member. It will be the team's responsibility to identify and ensure this person is available. If no alternate is available, the team forfeits the "Posse" use opportunity.)

- i. Preliminary Competition Use: If desired, each team, **once per game**, may use a lifeline by announcing they would like to "Call Their Posse." Using your lifeline by "Calling Your Posse" puts the team **"At Risk"** (see "At Risk" play and scoring details above). Game clock is paused during Posse identification. Once the Posse has been identified, the team will have 10 seconds to begin an answer. Once the "Posse" gives an answer or when their answer time runs out, time on the original game clock will be restarted and regular game play will continue.
 - ii. Finals Competition Use: If desired each team, **once per game**, may use a lifeline by announcing they would like to "Call Their Posse." Using your lifeline by "Calling Your Posse" puts the team **"At Risk"**. During Finals, the posse will be **unable** to confer with their team. Game clock is paused during Posse identification. Once the Posse has been identified, the Posse will have 10 seconds to begin an answer. Once the "Posse" gives an answer or when their answer time runs out, time on the original game clock will be restarted and regular game play will continue.
5. Bonus Period: There will be a Bonus Phase during the last two minutes of preliminary play and during the last three minutes of Finals play. A team who buzzes in first with a correct answer will receive 2 points (bonus). A team that buzzes in first with an incorrect answer will have 1 point deducted (penalty) and the second team will then receive an opportunity to answer the question. If correct, the second team will earn 1 point. If incorrect, the second team will have no points deducted. Call Your Posse" is unavailable during Bonus Periods.
 6. Sudden Death Period: Tie games at the end of regulation play shall be resolved by a sudden death playoff. The first team to score three points shall be declared the winner. All questions are **"At Risk"** format during sudden death period (see **"At Risk"** play and scoring details above). "Call Your Posse" is unavailable during Sudden Death Periods.

Competition Format:

- Team matches will be drawn and paired using a randomization program.
- Preliminaries will be held prior to the finals.
- Preliminaries will be played, in a double elimination format, until only 4 teams remain. The remaining four teams will advance to Finals.
- Finals will be of a single elimination format for the four teams remaining after preliminary competition.

Game Play Format & Questioning Errors:

1. The moderator will signal the beginning of each game
2. The time keeper shall time the length of play and announce the end of play
3. The scorekeeper shall maintain a running score visible to all participants and audience
4. If, due to moderator error, a question must be thrown out, after Team A has already missed it and before Team B has had a chance at the question, the very next question will be read to Team B which shall have ten seconds to respond within the

rules. Examples in which the situation mentioned above may occur could be a poorly worded question read by the moderator that elicited an incorrect answer from Team A due to the wording or if the moderator recognizes that the question has already been presented. The moderator will state that the question is being thrown out and instruct the scorekeeper how to adjust the score, if needed, and the timekeeper when to resume the time. Any points lost by Team A on the first question (penalty phase) shall stand and Team B shall earn points on the next question based on their correctness.

5. Any question begun prior to the end of regulation play shall be completed in accordance with the above rules if either team has buzzed in prior to the end of play.

Competition Set-Up:

- Preliminaries:
 - Two teams of up to three members competing at a time
 - “Posse” may be identified as lifeline
 - 10 minutes in length for each preliminary game
 - The team scoring the most points at the end of ten minutes is the winner of that game
 - A team will be eliminated when losing two games during the preliminary competition
 - When a team fails to take their seats within two minutes of being called at the time of their game, they shall forfeit that game and be given a loss
- Finals:
 - Two teams of up to three members competing at a time
 - “Posse” may be identified as lifeline
 - 10 minutes in length for the semifinal games
 - 15 minutes in length for the championship game
 - The team scoring the most points at the end of each game is the winner
 - The teams losing their first game in the semifinals competitions will be awarded third place
 - The loser of the championship game will be awarded second place
 - The winner of the championship game will be awarded first place

Submission of Teams:

- Any RT entry-level college made up of eligible players may register one team in the NCSRC Student Sputum Bowl.
- Each team must submit the following information:
 - Application
- If applicable, pending total applications, any RT entry-level college may register an additional team in the NCSRC Student Sputum Bowl by submitting an additional application
 - Registration date TBD, if applicable
 - Students may not play for multiple teams
- There is no cost for Sputum Bowl registration

Team Composition:

- A team will consist of at least three members, and no more than four.

- During competition, only 3 team members will be on stage. Team members can alternate during rounds.
 - Non-used alternate team member can compete as “Posse” during competition (See Competition Rules above)

Team Member Eligibility:

- Team members must be current members and in good standing of the American Association for Respiratory Care (AARC)/NCSRC as determined by current AARC bylaws at both the time of team application and at the time of the competition.
- An individual team member may not play on multiple teams.
- Student Sputum Bowl team members who win a Student Sputum Bowl championship will not be eligible to compete in the Student Sputum Bowl competition in subsequent years. The champions of a Student Sputum Bowl competition may enter the Student Sputum Bowl competition in the year after their Student championship.

Team Eligibility:

- Teams must meet all requirements of a Sputum Bowl team as set forth in this document.
- Teams must submit a completed application to play.

Moderator(s):

- The moderator(s) shall be someone familiar with the terminology of the profession and shall be appointed by the NCSRC Sputum Bowl Task Force.
- The moderator shall have the power and option to accept or reject an answer without asking for a judge's ruling.
- The moderator shall have the freedom to select questions in the order he/she sees fit and to throw out questions at any time as deemed necessary.
- The moderator(s) and NCSRC Sputum Bowl Task Force shall be responsible for choosing and reviewing questions prior to the competition to aid in determining the limits of acceptable alternate responses to each question and determine sets of questions for use during each round of play.
- Moderator may confer with judges if needed to determine correct or incorrect answers.

Judges:

- The judges shall be qualified individuals in their respective fields.
- Judges may review the individual and team eligibility prior to and during the actual competition to determine if any irregularities exist.
- The judges shall not be directly related to team members involved in any individual contest.
- The judges impaneled for the competition shall rule on the response to any question when so desired by the moderator and indicate whether they accept or reject a team's answer. All decisions shall be final and no challenges will be accepted based on the judges' prior ruling.

Questions:

- Questions used in competition will be traditional oral styled questions. They will be reviewed and selected by the Sputum Bowl Task Force prior to competition.

- The questions will represent the level of didactic and clinical proficiency the respiratory care practitioner is expected to possess.
 - The questions will not be of either the true/false or visual image format.
 - The questions will be referenced to the sources listed specified in Appendix A
- Question Categories/Percentages:
 - Anatomy and Physiology - 9%
 - Diagnostics - 9%
 - Pathology - 9%
 - Mechanical Ventilation - 9%
 - Neonatal and Pediatrics - 5%
 - Airway Management - 5%
 - Pharmacology - 5%
 - Gas Therapy - 5%
 - Acute/Critical Care - 5%
 - Humidity/Aerosol - 5%
 - Microbiology - 5%
 - Chemistry and Physics - 5%
 - Patient Assessment - 5%
 - Bronchial Hygiene - 5%
 - Patient Safety - 3%
 - Management - 3%
 - Cardiopulmonary Rehab - 3%
 - Home Care/Long Term Care - 3%
 - History - 2%

Challenging the Competition:

- Team captains are asked to wait at the contest site for **two minutes** after the completion of their game to learn of any protests relative to that contest.
- Protests will only be accepted for review if the protest will affect the outcome of the game **and** the protest is based on moderator error. Any protests concerning questions that the judges have already ruled on will not be accepted. The judges' rulings are **final**.
- A team member may submit a protest form **within two minutes after the completion of the game** in which the protest is claimed. The team captain is required to get the protest form from the Sputum Bowl Chair. The form must be completed in its entirety and returned to the Sputum Bowl Chair by the team captain by the conclusion of the following match.
- Any Sputum Bowl Committee references are on site for use by the Committee and judges only.
- The Review Committee shall consist of:
 - Scorekeeper
 - Moderator
 - Timekeeper
 - Judges
- Review shall consist of:
 - Team captains stating discrepancy and any or all supporting material or statements (limited to 5 minutes).

- Any rebuttal from the opposing team captain (limited to 5 minutes).
 - Committee meeting and reviewing all material pertinent to the proceedings.
 - Final decision voted upon and decided by the majority of the Review Committee within one hour of the completion of that round of competition.
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- A team, which has won a game in regular play, cannot be declared the loser of that game as a result of a protest. Teams, which lose a game in regular play and as a result of the remedy applied to a successful protest would not lose, but will play their opponent in a sudden death playoff per the rules contained above (see Competition Rules)

Electronic Systems

- Electronic systems shall be used and will provide the following
 - Hand switches/buzzer for each contestant.
 - Indicator system to show which team has responded first.
 - Timer mechanism for game play and timed responses of 10 seconds
 - Reset device for timekeeper to reset system in preparation for the next question.
 - Timekeeper shall be the person in control of the device and shall have a thorough working knowledge of the device.
- In the case of an electronic malfunction, any Sputum Bowl Task Force member or judge shall immediately notify the moderator who will call time. The game clock shall be reset to the time when the malfunction was first noticed. The question in progress shall be thrown out. The moderator shall signal time in and begin with a new question. No points may be awarded on the question thrown out nor may they be deducted if in the penalty phase. Prior to restarting play the moderator shall make certain that all systems are operational and clear.

Appendix A: Student Sputum Bowl Reference List

(Adopted from the AARC 2024 Student Sputum Bowl Competition Reference List - NCSRC Sputum Bowl Resources heavily used for references are italicized [some previous editions have been used due to availability and are underlined])

1. American Academy of Pediatrics. (2021). Textbook of neonatal resuscitation (8th edition). American Academy of Pediatrics.
2. American Association for Respiratory Care. (2023, November 20). Evidence-based clinical practice guidelines. Clinical Practice Guidelines. <https://www.aarc.org/resources/clinicalresources/clinical-practice-guidelines/>
3. American Heart Association. (2020). Advanced cardiac life support 2020 guidelines. American Heart Association.
4. American Heart Association. (2020). Pediatric advanced life support 2020 guidelines. American Heart Association.
5. Beachey, W. (2022). *Respiratory care anatomy and physiology: Foundations for clinical practice (5th edition)*. Elsevier.
6. *Buchbinder, S.B., Shanks, K., & Kite, B.J. (2020). *Introduction to healthcare management (4th edition)*. Jones & Bartlett Learning.*
7. Cairo J.M. (2021). Mosby's respiratory care equipment (11th edition). Elsevier.
8. *Cairo, J.M. (2019). *Pilbeam's mechanical ventilation: Physiological and clinical applications (7th edition)*. Elsevier.*
9. Des Jardins, T., & Burton, G.G. (2023). Cardiopulmonary anatomy & physiology: Essentials for respiratory care (7th edition). Elsevier.
10. *Des Jardins, T., & Burton, G.G. (2023). *Clinical manifestations and assessment of respiratory disease (9th edition)*. Elsevier.*
11. *Gardenhire, D.S. (2023). *Rau's respiratory care pharmacology (11th edition)*. Elsevier.*
12. Global Initiative for Chronic Obstructive Lung Disease. (2024). Global strategy for the prevention, diagnosis and management of COPD: 2024 report. Gold Reports. <https://goldcopd.org/2024gold-report/>
13. Global Initiative for Asthma. (2023). 2023 GINA report, global strategy for asthma management and prevention. GINA Reports. <https://ginasthma.org/2023-gina-main-report/> 10
14. *Hess, D.R., MacIntyre, N.R., Galvin, W.F., & Mishoe, S.C. (2020). *Respiratory care: Principles and practice (4th edition)*. Jones & Bartlett Learning.*
15. Heuer, A.J. (2022). Wilkins' clinical assessment in respiratory care (9th edition). Elsevier.
16. *Oakes, D., & Jones, S. (2021). *Oakes' respiratory care pocket guide (10th edition)*. Health Educators Publications, Inc.*
17. *Stoller, J.K., Heuer, A.J., Chatburn, R.L., Mireles-Cabodevila, E., & Vines, D. L. (2024). *Egan's fundamentals of respiratory care (13th edition)*. Elsevier.*
18. Respiratory Care. The Official Journal of the American Association for Respiratory Care. July 2019 through July 2024.
19. U.S. Department of Health and Human Services. (2020). 2020 Focused updates to the asthma management guidelines: A report from the national asthma education and prevention program coordinating committee expert panel working group. <https://www.nhlbi.nih.gov/resources/2020-focused-updates-asthma-management-guidelines>
20. *Walsh, B. (2022) *Neonatal and pediatric respiratory care (6th edition)*. Saunders.*

Appendix B: Optional Question Submission

Each affiliate entering the competition is asked to submit 5 visual images and/or 5 written questions for use in future editions of the Sputum Bowl. This option applies only once per year per participating team.

- Questions must meet question category requirements (See “Question Categories/Percentages” p.6)
- Must be submitted in a professional fashion of submitters choice
 - Ensure photos are visible
 - Original photos preferred, provide a source for any other images
- The definition of a “visual question” is one that CANNOT be answered without seeing the picture associated with it
- All questions must have an associated reference
 - The photographs submitted for visual questions do not have to appear directly in the reference but the content of the image shall have the ability to be referenced
- Affiliates submitting photographs depicting patients are expected to have obtained signed releases authorizing the use of the photographs in Sputum Bowl competition. These documents must be available upon request by the NCSRC Sputum Bowl Committee. Note that it is not necessary to submit release forms with visual questions. Release forms should be obtained from your hospital or other employer.
- All visual questions MUST be new and original EACH year. Do NOT send in previously submitted visual questions.

