



2023 STUDENT SPUTUM BOWL NOTEBOOK

This is the updated version of the 2023 AARC Student Sputum Bowl Competition Notebook. **PLEASE carefully read the rules.** Each team is responsible for understanding the new rules.

April 13, 2023

Dear AARC State Affiliate Presidents, State Sputum Bowl Coordinators and RT Program Directors:

The AARC Program Committee cordially invites your chartered affiliate to participate in the AARC Student Sputum Bowl competition, November 5-8, 2023 in Nashville, TN. We haven't held a student sputum bowl in several years due to the Covid 19 pandemic and are happy to announce it's return! Our last bowl included 25 student teams participated in this contest. You and your affiliate's participation in the Student Sputum Bowl competition will make this a highlight of the AARC International Respiratory Congress.

Each affiliate is encouraged to promote this event to the RT educational programs throughout your affiliate. Some states sponsor a team and assist with travel or other expenses of the team but this is not a requirement. In an attempt to encourage as many teams to register as possible, teams will be accepted regardless of any affiliation or standing they may have in their state (i.e. state or regional champion). Additionally, there will be no limit to the number of teams that can register from any individual state or individual RT program.

Due to the physical and time limitations for a double elimination format, ***we must limit participation to 30 teams***. The first 30 places will be reserved and confirmed back to the team captain based upon receipt of ALL completed application forms and payment of the registration fee. Applications received after 30 teams have been confirmed will be held on a waiting list.

The 2023 Student Sputum Bowl Rules and all required forms are included in this packet or can be located on the [AARC website](#). Please review the rules carefully and make certain your affiliate's team members review them as well.

Team registration will open **April 13, 2023** and registrations will be confirmed once a completed application, completed team roster and the team registration fee have ALL been received. Registration will not be confirmed if any part of the registration process is not complete. Note that ***confirmed registrations will be made on a first come, first serve basis of completed applications***.

We look forward to seeing you in Nashville!

Sincerely,

Thomas Lamphere BS, RRT-ACCS, RPFT, FAARC
Chair, 2023 AARC Student Sputum Bowl Committee

Synopsis of 2023 Rules Changes and Important Reminders

- A team may register to compete in this year's event regardless of any affiliation or standing they may have in their state (i.e. state or regional champion).
- There will be no limit to the number of teams that can register from any individual state or individual RT program.
- Submission of written and/or visual questions by teams will NOT be required. All questions will be written and prepared by the AARC Sputum Bowl Committee.
- Team Captains (or a designee) are required to attend a mandatory meeting on Saturday, November 4, 2023 at 5:30 p.m. We will provide new players with a review of the Rules of Competition and to present basic strategies. This session is **optional for non-Team Captains, but highly recommended**. In the event a Team Captain (or designee) is unable to attend the orientation session, please email the Sputum Bowl Chair in advance to confirm that your team will be present to compete in the preliminary matches beginning November 5th.
- ALL teams must pay a \$100 non-refundable registration fee when submitting their application.
- All team members must be a member of the AARC to be eligible to compete in the Sputum Bowl. If a team member's AARC membership is due to expire on or before September 15, 2023, *the membership must be renewal must be completed prior to the September 15th application deadline*. Note that AARC membership can be renewed / extended at any time.
- The AARC Annual Meeting policy prohibits recording devices of any kind during contests.
- There will be no adjustments to the game schedules. If team members anticipate a potential conflict with other commitments at the AARC Congress, they should plan accordingly and ensure at least one team member is there to compete (if no team members are present, the game is forfeited). The AARC Sputum Bowl Committee strongly encourages contestants to participate in as many of the AARC events as possible and will schedule matches as far in advance as possible. However, initial round matches cannot be scheduled until November 4, 2023 following the Team Captain's meeting. Once the team pairings are set, the scheduling format will be adhered to throughout the contest.
- 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 during game play.
- The moderator will ask the pre-selected questions. Anyone may answer a toss-up question. 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. If the answer is correct, they are "Rewarded" with a point. If the answer is incorrect, a point will be deducted from their score. Then the moderator will 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. The moderator will judge the first answer given by any team as to its correctness, and if correct, indicate so to the scorekeeper.
- A team will never be "At Risk" if they respond to a question **after** the moderator has finished reading it, unless in the bonus period.
- If they wish, each team, once per game, may use a lifeline called **"Ask an Expert"**. This lifeline will become **"Call your Posse"** during the Finals competition.

- “Ask an Expert or Call Your Posse”
 1. In **preliminary** competition, each team must submit the name of their “Expert” to the Sputum Bowl committee *prior* to the start of each game. The team may choose whomever they wish except anyone on the Sputum Bowl Committee or any judge who is presiding during the round. When a team responds to a question and wishes to use the lifeline, they will announce to the moderator that they would like to ask their “Expert”. The “Expert” must be readily available to join the team for the single question. The team will have 10 seconds total to begin an answer. “Risk/Reward” will apply when using your expert.
 2. In **Finals** competition, each team will compose 8 people for their posse prior to the evening’s contest. The “Posse” will sit at the tables reserved for the teams at the front of the auditorium. The “Posse” will be responsible to answer the question **without** consultation with their team. “Risk/Reward” will apply when using your “Posse”. Once a team decides to “Call the Posse” the game clock will be stopped. When the “Posse” has been identified, a separate clock will be used to time the Posse’s answer period. The Posse will have 10 seconds total 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.
- After the 2:00 minute mark (or 3:00 minute mark in the Finals), no slide questions will be asked nor will any “Ask an Expert/Call your Posse” lifelines be allowed.
- 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. **“Risk/Reward” will apply but not “Ask the Expert/Call your Posse” during the sudden death playoff.**

**The American Association for Respiratory Care
SPUTUM BOWL
RULES OF COMPETITION**

REVISED January 2023

- I. **The prime objective of the Sputum Bowl is to stimulate interest in the current knowledge and practices of respiratory care.**
- II. **The competition shall be held in a spirit of professionalism and good sportsmanship.**
- III. **There are no losers in this contest. All should gain from this experience a greater understanding of respiratory care and themselves.**
- IV. **Submission of Teams**
 - A. Any team made up of eligible players may register to participate in the Sputum Bowl. Affiliation with an AARC State Affiliate is not required.
 - B. Each team must submit the following information:
 - A completed application for admission to the contest prior to the deadline noted in these rules.
 - A completed roster of eligible team members prior to the deadline noted in these rules.
 - Payment of the required registration fee
 - C. Confirmation of a team's acceptance into the event will not be provided until all of the above is received and complete.
 - D. Registrations are confirmed on a first come, first serve basis and based on those that are fully completed.
- V. **Sputum Bowl Team Composition**
 - A. A team shall consist of at least three and not more than four (4) Respiratory Care student team members.
Note: Only three members can compete in any one match but team members can alternate between matches.
 - B. Member Eligibility
 1. Team members (herein considered the team) must be current members in good standing of the American Association for Respiratory Care (AARC) as determined by current AARC bylaws at both the time of team application and at the time of the competition.
 2. An individual may be a member on only one team entered in the student competition.
 - C. Team Eligibility
 1. Teams must meet all requirements of a Sputum Bowl team as set forth in these rules.
 2. Teams must submit a completed application to play, team roster and payment of a \$75 non-refundable registration fee prior to the deadline established in these rules.
 3. There is no limit to the number of teams that can compete from a particular state or educational program.
 4. Teams may consist of members from different educational programs and/or states as long as all other eligibility rules are met.

VI. Format for National Competition

- A. The national competition will be held during the AARC Congress.
 - 1. Preliminaries will be held prior to the finals.
 - 2. Preliminaries will be of a double elimination format.
 - 3. Finals will be of a single elimination format for the four teams remaining after preliminary competition.
 - 4. Preliminaries will be played, in a double elimination format, until only 4 teams remain. The remaining four teams will advance to Finals.
 - 5. Teams matches will be paired using a randomization program.

VII. Moderators

- A. The moderator shall be someone familiar with the terminology of the profession and shall be appointed by the Sputum Bowl Committee Chairman.
- B. The moderator shall have the power and option to accept or reject an answer without asking for a judge's ruling.
- C. The chairman of the Sputum Bowl Committee and moderator shall be responsible for the physical setup of the contest site, the proper functioning of all equipment, questions and all other necessary arrangements to ensure a smoothly run game.
- D. During the playing of the game, the moderator is in charge. He/she must control the actions of the teams, judges, scorekeeper, timekeeper and audience.
- E. The moderator shall review all questions prior to the competition to determine the limits of acceptable alternate responses to each question and determine sets of questions for use during each round of play.

VIII. Judges

- A. The judges shall be qualified individuals in their respective fields.
- B. Judges may review the individual and team eligibility prior to and during the actual competition to determine if any irregularities exist.
- C. The judges shall not be directly related to team members involved in any individual contest.
- D. 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.

IX. The Competition

- A. Preliminaries
 - 1. A game will consist of:
 - a. Two teams of up to three members each competing at a time.

- b. Ten (10) minutes in length
 - c. The team scoring the most points at the end of ten minutes is the winner of that game.
 - d. A team will be eliminated when losing two games during the preliminary competition
 - 2. When a team fails to take their seats within one minute of being called at the time of their game, they shall forfeit that game and be given a loss.
- B. Finals
- 1. A game will consist of:
 - a. Two teams in competition
 - b. 10 minutes in length for the semifinal games, 15 minutes in length for the Finals games.
 - c. The team scoring the most points at the end of each game is the winner.
 - 2. The final four teams will be paired at random and will compete for berths in the championship game.
 - a. The teams winning their first game in the final competition will meet in the championship game.
 - b. The teams losing their first game in the final competition will be awarded third place.
 - c. The winner of the championship game will be awarded first place. The loser of the championship game will be awarded second place.
- C. The moderator shall signal the beginning of each game.
- D. The timekeeper shall time the length of play and announce the end of play.
- E. The scorekeeper shall maintain a running score visible to all participants and audience and record the verbal portion of all match play.
- F. The moderator will ask the pre-selected questions. Anyone may answer a toss-up question. 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. If the answer is correct, they are “Rewarded” with a point. If the answer is incorrect, a point will be deducted from their score. Then the moderator will 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. The moderator will judge the first answer given by any team as to its correctness, and if correct, indicate so to the scorekeeper.
- G. A team will never be “At Risk” if they respond to a question **after** the moderator has finished reading it.
- H. If they wish, each team, once per game, may use a lifeline called “**Ask an Expert**”. This lifeline will become “**Call your Posse**” during the Finals competition.
- I. “Ask an Expert/Call your Posse”
- 1. In **preliminary** competition, each team must submit the name of their “Expert” to the Sputum Bowl committee *prior* to the start of each game. The team may choose whomever they wish except anyone on the Sputum Bowl Committee or any judge who is presiding during the round. When a team responds to a question and wishes to use the lifeline, they will announce to the moderator that they would like to ask their “Expert”. The time clock will then be set to 10 seconds. The “Expert” must be readily available to join the team for the single question; upon joining the team the clock will start counting down from 10 seconds. The team will have 10 seconds total to begin an answer. If the allotted time to answer the question has passed the moderator may move on to the opposing team and reread the question. If both teams have been read the question the moderator will proceed on with the round. “Risk/Reward” will apply when using your expert.

2. In **Finals** competition, each team will compose 8 people for their posse prior to the evening's contest. The "Posse" will sit at the tables reserved for the teams at the front of the auditorium. The "Posse" will be responsible to answer the question **without** consultation with their team. "Risk/Reward" will apply when using your "Posse". Once a team decides to "Call the Posse" the game clock will be stopped. When the "Posse" has been identified, a separate clock will be used to time the Posse's answer period. The Posse will have 10 total seconds to begin to 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.

J. If neither team responds to a question within ten seconds after the moderator has completed its reading, the question will be set aside and questioning will continue.

K. Each correct answer to a question will have a value of one point

After the 2:00 minute mark (or 3:00 minute mark in the Finals), no slide questions will be asked nor will any "Ask an Expert/Call your Posse" lifelines be allowed.

L. Bonus/Penalty Phase

1. 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). If the first team that buzzes in is incorrect, that team will lose a point and the second team will then receive an opportunity to answer the question. If correct, the second team will earn 1 point. If incorrect, no points will be deducted.

M. 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. The moderator at all other times shall have the freedom to select questions in the order he sees fit and to throw out questions at any time as deemed necessary.

N. 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. **"Risk/Reward" will apply but not "Ask the Expert/Call your Posse" during the sudden death playoff.**

O. Any question begun prior to the end of regulation play shall be completed in accordance with the above rules if either team has responded prior to the end of play. (Elapsed time to 0:00 as determined by the timekeeper.)

X. Questions

A. Questions used in competition will be of both the traditional oral and visual types. They will be reviewed and selected by the Sputum Bowl Committee prior to competition.

1. The questions will represent the level of didactic and clinical proficiency the respiratory care practitioner is expected to possess.

2. The questions will not be of either the true/false or multiple-choice format.

3. The questions will be referenced to the list specified in Appendix A.

4. The categories of questions for competition will be used in the following approximate percentages:

a. Anatomy and Physiology	9%
b. Diagnostics	9%
c. Pathology	9%
d. Mechanical Ventilation	9%
e. Neonatal / Pediatrics	5%
f. Airway Management	5%
g. Pharmacology	5%
h. Gas Therapy	5%
i. Acute/Critical Care	5%
j. Humidity/Aerosol	5%
k. Microbiology	5%
l. Chemistry/Physics	5%
m. Patient Assessment	5%
n. Bronchial Hygiene	5%
o. Patient Safety	3%
p. Management	3%
q. Cardiopulmonary Rehab	3%
r. Home Care/Long Term Care	3%
s. History	2%

XI. Challenging the Competition

- A. 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.
- B. 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**.
- C. 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.
- D. Any Sputum Bowl Committee references are on site for use by the Committee and judges only.
- E. The Review Committee shall consist of:
 1. Scorekeeper
 2. Moderator
 3. Timekeeper
 4. Judges
- F. Review shall consist of:
 1. Team captains stating discrepancy and any or all supporting material or statements (limited to 5 minutes).
 2. Any rebuttal from the opposing team captain (limited to 5 minutes).
 3. Committee meeting and reviewing all material pertinent to the proceedings.

4. Final decision voted upon and decided by the majority of the Review Committee within one hour of the completion of that round of competition.
- G. 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 in IX.N above.

XII. Electronics Systems

- A. The device shall be constructed to provide the following:
1. Hand switches for each contestant.
 2. Indicator system to show which team has responded first.
 3. Timer mechanism to time responses of 10 seconds for initial response and timer for 10 seconds when the question is given to the opposing team.
 4. Reset device for timekeeper to reset system in preparation for the next question.
- B. Timekeeper shall be the person in control of the device and shall have a thorough working knowledge of the device.
- C. In the case of an electronic malfunction, any Sputum Bowl Committee 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.
- D. **In keeping with AARC annual meeting policy, no recording devices of any kind will be permitted during contests.**

XIII. Student Sputum Bowl Competition

- A. The AARC Sputum Bowl Committee will conduct a Student Sputum Bowl competition at the International Congress.
- B. As part of your participation, each team member will receive a free **student-level** Congress registration. However, please note, a student-level registration **does not allow** you to earn CRCE. If you have graduated and would like to earn CRCE at this year's Congress, you will need to register at the Active-level, paying the full amount.
- A. Student Sputum Bowl Team Member Qualification:
- Student team members must be current members of the AARC at the time of competition, satisfying the same criteria as defined in rules V.A, V.B and V.C above.
 - 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.
 - Student Sputum Bowl team members may not compete on another team in the same year. In other words, compete on both the Student level and the National level at the same time.
 - Each Student Sputum Bowl team member must be a current student in a Respiratory Care educational program, or must have graduated from a Respiratory Care educational program during the current calendar year. This student status must be verified for every team member, and validated by the student's program director, on the Student Sputum Bowl roster, which must be submitted to the AARC no later than September 16, 2019.
- B. Preliminary competition among the student teams will be conducted in conjunction with the National competition. This preliminary competition will result in four finalist teams, which will advance to a championship game at the finals. The Student Finals competition will consist of two semi-final games of ten minutes each and a Student Championship game lasting 15 minutes.

- C. All other issues relating to the Student Sputum Bowl competition will be governed by the rules and contained here or in the Timetable and Format. Student Sputum Bowl context, structure and resources will be provided by the AARC Sputum Bowl Committee, including question bank, moderators, judges.

APPENDIX A

AMERICAN ASSOCIATION FOR RESPIRATORY CARE

2023 Student Sputum Bowl Competition

Reference List

American Association for Respiratory Care. Evidence Based Clinical Practice Guidelines.

<https://www.aarc.org/resources/clinical-resources/clinical-practice-guidelines/>

American Heart Association. Pediatric Advanced Life Support. 2019 Guidelines.

<https://www.ahajournals.org/doi/10.1161/CIR.0000000000000731>

American Heart Association. Advanced Cardiac Life Support. 2022 Guidelines.

<https://www.ahajournals.org/doi/10.1161/CIR.0000000000001095>

Cairo J.M. Mosby's Respiratory Care Equipment. 9th edition. Elsevier (Mosby – Elsevier) Company. 2014

Beachey, W. Respiratory Care Anatomy and Physiology: Foundations for Clinical Practice (3rd ed.). St. Louis, MO: Elsevier (2013).

Buchbinder, S., & Shanks, K. Introduction to healthcare management. 3rd edition. Burlington, MA: Jones & Bartlett Publisher (2017).

Desjardins, T. and Burton, G. Clinical Manifestations and Assessment of Respiratory Disease. 7th edition. Elsevier (Mosby - Saunders) Company. 2016.

Gardenhire, D. Rau's Respiratory Care Pharmacology. 9th edition. Elsevier (Mosby – Saunders) Company. 2015

Global Strategy for the Diagnosis, Management and Prevention of COPD, Global Initiative for Chronic Obstructive Lung Disease (GOLD) 2023. <https://goldcopd.org/2023-gold-report-2/>

Guidelines for the Diagnosis and Management of Asthma, Summary Report 2020. National Asthma Education and Prevention Program, Expert Panel Report 3. <http://www.nhlbi.nih.gov/guidelines/asthma/asthsumm.pdf>
<https://www.nhlbi.nih.gov/health-topics/asthma-management-guidelines-2020-updates>

Hess, D. R., et al. Respiratory Care Principles and Practice. 4th edition. Jones and Bartlett. 2020.

Heuer, A.J. & Scanlan, C. L. Clinical Assessment in Respiratory Care. 7th edition. Elsevier (Mosby – Saunders) Company. 2014.

Kacmarek, R., et al. The Essentials of Respiratory Care. 4th edition. Elsevier (Mosby – Saunders) Company. 2005

Kacmarek, R., Stoller, J., & Heuer, A. *Egan's Fundamentals of Respiratory Care* (11th ed.). St. Louis, MO: Mosby (2017).

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Oakes, D.F. Oakes' Practitioner's Pocket Guide to Respiratory Care. 9th edition. Health Educator Publications Inc. 2016

Pilbeam, S. Mechanical Ventilation. 6th edition. Elsevier (Mosby – Saunders) Company 2016.

Respiratory Care. The Official Journal of the American Association for Respiratory Care. July 2012 through June 2017.

Walsh, B., et al. Perinatal and Pediatric Respiratory Care 4th edition, Elsevier (Mosby – Saunders) Company. 2015.

APPENDIX B

- a. Anatomy and Physiology
- b. Diagnostics
- c. Pathology
- d. Mechanical Ventilation
- e. Neonatal / Pediatrics
- f. Airway Management
- g. Pharmacology
- h. Gas Therapy
- i. Acute/Critical Care
- j. Humidity/Aerosol
- k. Microbiology
- l. Chemistry/Physics
- m. Patient Assessment
- n. Bronchial Hygiene
- o. Patient Safety
- p. Management
- q. Cardiopulmonary Rehab
- r. Home Care/Long Term Care
- s. History

DUE DATES AND MAILING ADDRESS

Please submit your completed application, questions and roster no later than the listed due dates. These deadlines are the dates on which the information must be **received** in the AARC Executive office.

Teams are encouraged to submit ALL completed requirements and payment ASAP after the opening of registration as teams are accepted on a first come, first serve basis up to the maximum of 30 teams.

	<u>Deadline</u>
○ Team Application	September 15, 2023
○ Team Rosters	September 15, 2023
○ Registration Fee	September 15, 2023
○ Roster Revisions	October 1, 2023

If you should have any questions, please feel free to call or email:

AARC Convention Department
9425 N. MacArthur Blvd., Suite #100
Irving, TX 75063-4706
972-243-2272 Phone
972-484-2720 Fax

Thank you for your cooperation and best of luck to everyone!!