To: All Emergency Medical Services (EMS) Agencies  
From: REMO Medical Advisory Committee (MAC)  
RE: BLS Albuterol Administration Program  
Date: May 1, 2001

On behalf of the Regional Council and our MAC we would like to thank you for your interest in the Basic Life Support (BLS) Albuterol Administration program. Based on the success of the BLS Albuterol Administration pilot program in New York City, the State Emergency Medical Advisory Council (SEMAC) approved this initiative for regional implementation. The goal of this program is to provide faster appropriate care to asthma patients in our region.

This information packet will help your agency apply for participation in this program. Details of all requirements are enclosed. Please call REMO (518) 464-5097 if you have any questions. Thank you for your time and interest in the BLS Albuterol Administration Program.
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10. NYS EMS Policy Statement 09-12
Regional Emergency Medical Organization (REMO)
BLS Albuterol Administration Program

Application Checklist

All BLS Agencies:

___ Signed Letter of Intent

___ Required Agency Information Sheet

___ Signed Statement of Agreement from Medical Advisor

___ Signed Statement of Agreement from ALS Agency

BLS Non transport agencies must also include:

___ Letter of agreement for transportation from their primary ambulance service
Agency Letter of Intent for Participation in the BLS Albuterol Administration Program

We, the members of ________________________________, hereby request permission to participate in the REMO BLS Albuterol Administration Program. We agree to abide by the following:

1. All necessary equipment and albuterol trained personnel will be provided on a twenty-four (24) hour per day, seven (7) days a week schedule.

2. All providers will pass the REMO Albuterol Administration Protocol Quiz.

3. Our agency is regionally certified at the Defib level.

4. All agency and personnel must follow all policies, procedures and protocols set forth by the Regional Medical Advisory Committee and NY State.

5. Our agency will provide and document annual albuterol updates with competency skill testing for all active providers.

6. Our agency agrees to participate in the Regional Quality Improvement Program. All calls in which albuterol is administered must be reviewed by the agency Medical Advisor.

7. If our agency, or one of our personnel disregards these guidelines and/or other applicable protocols, the privilege of providing prehospital albuterol treatment may be revoked or suspended by the Medical Advisory Committee.

8. Any changes to the Required Agency Information will be reported to REMO within 30 business days.

The signatures below certify that the above conditions will be maintained and that we will be responsible for all aspects of participation in this Regional program.

__________________________________________________________  ________________________________
Agency Captain/President                                    Agency Medical Advisor
BLS Albuterol Administration Program

ALS Agency Statement of Agreement

ALS Agency Name ________________________________

Address ________________________________________

______________________________

ALS Coordinator _______________ Daytime contact number __________________

We the above agency agree to provide ALS intercepts for _______________________

(BLS Agency)

when asked to assist with patients in respiratory distress. We have discussed with the aforementioned agency that intercepts will only be available when resources permit.

Signed: ____________________________

Captain/President

Date: ____________________________
REMO
BLS Albuterol Administration Program
Required Agency Information (please print)

Agency Name: _______________________________ Agency Phone Number: ____________________
Agency Mailing Address: _______________________________ City: _________ Zip___________

1. Designated representative responsible for the BLS Albuterol Administration Program:
   Name: ____________________________
   Daytime #: ____________________________
   Email (if applicable): ____________________________

2. Agency Administrator (Captain or President):
   Name: ____________________________
   Daytime #: ____________________________
   Email (if applicable): ____________________________

3. Agency Medical Advisor:
   Name: ____________________________
   Daytime #: ____________________________
   Email (if applicable): ____________________________

4. Agency QI Coordinator:
   Name: ____________________________
   Daytime #: ____________________________ Email (if applicable): ____________________________

5. We will be purchasing albuterol from:
   Distributor name: ________________________________

6. Albuterol will be stored in the Agency's station in the following manner:
   ______________________________________________________
   ______________________________________________________

7. Albuterol will be carried and secured on the ambulance(s) in the following manner:
   ______________________________________________________
   ______________________________________________________

8. The following ALS agencies will be called for intercepts:
   ______________________________________________________
   ______________________________________________________

9. Must Be Completed By BLS Non-transporting Agencies ONLY:

   Primary transporting ambulance service:
   Name: ________________________________
BLS Albuterol Administration Program
REMO Region

Medical Advisor Statement of Agreement

I hereby agree to serve as the Medical Advisor for:

___________________________________________

(name of agency)

I understand that all patient care will be provided under my license, in accordance with NYS and REMO regional protocols and training guidelines, except in cases of gross negligence resulting in injury or death.

Upon signing this document, I agree to:

- Provide and/or assist with annual albuterol in-services/updates and training
- Annually renew the albuterol agreement with this agency
- Participate in Q.I., and review all calls in which albuterol was administered and any other calls as necessary
- Provide medical leadership
- Act as a resource for continuing education
- Remain familiar with regional and NY State BLS protocols

In addition, I have read and agree to the guidelines set forth in the attached pages entitled "Agency Medical Advisor" and "Recommended Guidelines for Medical Advisors". If I have any questions concerning my responsibilities, I will contact REMO.

MD signature: ______________________________________________________

MD name printed: __________________________________________________

Date: ___________ MD daytime phone #: ______________________________

MD address: ________________________________________________________

___________________________________________________
Equipment List

The following minimum equipment should be carried on every BLS unit:

2 Nebulizer with mouthpiece (T-tube)

4 Albuterol Sulfate 2.5 ml in 3cc normal saline (unit dose)
For use by EMT Basics who have received both appropriate training and REMAC authorization to provide this care.

FOR PATIENTS BETWEEN ONE AND SIXTY-FIVE YEARS OF AGE, WHO ARE EXPERIENCING AN EXACERBATION OF THEIR PREVIOUSLY DIAGNOSED ASTHMA:

1. ASSESS THE AIRWAY
2. ADMINISTER OXYGEN

Note:
For severe respiratory distress request advanced life support if available.
Do not delay transport to the hospital.

3. MONITOR BREATHING

NOTE: IF PATIENT EXHIBITS SIGNS OF IMMINENT RESPIRATORY FAILURE REFER TO NYS BLS PROTOCOL ADULT OR PEDIATRIC RESPIRATORY ARREST.

4. DO NOT PERMIT PHYSICAL ACTIVITY.

5. PLACE THE PATIENT IN THE FOWLER’S OR SEMI-FOWLER’S POSITION.

6. ASSESS THE FOLLOWING PRIOR TO ADMINISTRATION OF THE FIRST NEBULIZED TREATMENT:
   - VITAL SIGNS
   - PATIENT’S ABILITY TO SPEAK IN COMPLETE SENTENCES
   - ACCESSORY MUSCLE USE
   - WHEEZING
   - ASSESSMENT OF SEVERITY, i.e. PEAK FLOW METER, BORG SCALE, OR OTHER

   NOTE: FOR PATIENTS WITH A HISTORY OF ANGINA, MYOCARDIAL INFARCTION, ARRHYTHMIA OR CONGESTIVE HEART FAILURE, MEDICAL CONTROL MUST BE CONTACTED PRIOR TO INITIATING STEP #8.

7. BEGIN TRANSPORT

8. ADMINISTER ALBUTEROL. DO NOT DELAY TRANSPORT TO COMPLETE MEDICATION ADMINISTRATION.

9. IF SYMPTOMS PERSIST, TREATMENT MAY BE REPEATED ONCE FOR A TOTAL OF TWO (2) DOSES.

10. UPON TRANSFER OF PATIENT CARE TO AN ALS PROVIDER OR RECEIVING HOSPITAL, REASSESS THE PATIENT. SEE STEP #6.
ACUTE RESPIRATORY DISTRESS

1. Place the patient in a position of comfort. This is usually a sitting position.

2. Administer high concentration oxygen by non-rebreathing mask. Assist ventilations as necessary.

3. QUICKLY OBTAIN A HISTORY that includes the following:
   - Activity at onset,
   - Any associated pain,
   - Any recent respiratory infections, fever, or chills,
   - Change in sputum (amount, color, viscosity),
   - Orthopnea (short of breath while laying down) or nocturnal dyspnea (SOB at night),
   - History of chronic bronchitis, emphysema, or asthma,
   - Smoking history,
   - Any recent immobilization,
   - Previous history, and any medications being taken.

4. Do a PHYSICAL EXAM to include:
   - Vital Signs,
   - Breath sounds,
   - Oxygen Saturation, if available,
   - Respiratory and Cardiovascular system assessment.

5. CALL FOR PARAMEDIC / CRITICAL CARE INTERCEPT.

6. Treat the patient according to the following sub-protocols:
   - ACUTE BRONCHOSPASM / ACUTE ASTHMA
   - ALLERGIC REACTION / ANAPHYLAXIS
   - APNEA OR IMMINENT RESPIRATORY ARREST
ACUTE BRONCHOSPASM / ACUTE ASTHMA

REMEMBER, "all that wheezes is not asthma!" Investigate the possibility of: Allergic Reaction, Upper Airway Obstruction, Cardiac Problem, Respiratory Infection, Chronic Lung Disease.

1. If the patient has a history of asthma, determine the type and amount of bronchodilator medication already taken.

2. Continue high concentration oxygen by non-rebreathing mask.

3. Observe the patient's respirations and level of consciousness carefully! If the patient's level of consciousness is diminished or respiratory arrest is imminent, ventilate with 100% oxygen using a bag-valve mask.

4. Request an intercept at the Paramedic/Critical Care level.

5. BLS STANDING ORDERS FOR PATIENTS AGED 1-65 years old:

   A. **If your agency has been approved to carry Albuterol and the provider has been trained:** administer 2.5mg. Albuterol in 3cc of normal saline (one unit dose) by nebulizer. May be repeated a second time if patient is still in respiratory distress. A total of 2 treatments may be administered (including any self-administered nebulized treatments).

   B. **If your agency does not carry Albuterol:** May assist the patients in taking up to two puffs of their OWN prescribed inhaler ONLY under the following conditions:
      - EMT has checked ABC's first!
      - The inhaler is prescribed for that patient (not spouse or relative).
      - The inhaler is a beta-2 agonist / bronchodilator, such as: Metaproterenol (Alupent or Metaprel) and Albuterol (Proventil or Ventolin).
      - The patient must be able to take a deep breath and coordinate their breathing. (This may be difficult if patient is in severe distress).
      - The patient must be alert and oriented.

   C. **If respiratory distress persists, a REMO physician must be contacted for further orders. If unable to contact a REMO physician, contact any Emergency Department physician at the destination hospital.**

   D. Do NOT delay transportation to assist with medications.

   E. Remember to apply high flow oxygen before and after medication.

   Documentation Must Include:

   1. Time medication taken.
   2. Respiratory rate / O2 saturation if available / lung sounds before and after medication.
   3. Full set of vital signs before and after medication.
   4. Appropriate history.
   5. Any changes in patient condition.
1. Who can participate?
   - BLS agencies must be regionally certified at the Defib level.
     - Personnel must minimally possess a current NYS EMT CARD.
     - CFRs are not eligible for participation.

2. Who can train personnel?
   - All trainers must be credentialed as any of the following:
     - Critical Care Technician
     - Paramedic
     - BLS CLI/CIC, Intermediate, that has completed the REMO Train-the-Trainer Program and internship
     - RN / PA / MD familiar with all policies and protocols

3. What training material can be used?
   - The REMO training material is the minimum requirement. Additional resources may be added when applicable.

4. Where can training staff be found?
   - Contact your County EMS Committee or REMO

5. How does an agency apply for participation?
   - After all training is completed, submit the enclosed application material to REMO.

6. How will our agency be approved?
   - Application material will be reviewed by REMO and forwarded to the Regional MAC for approval. The MAC meets on the first Wednesday of each month. You will be notified in writing when your application is approved.

7. How many agency EMTs must be trained?
   - The agency MUST be capable of providing this modality 24 hours per day / 7 days a week. An Albuterol trained EMT must be available for each call the agency responds to - JUST LIKE DEFIB!

8. What are the Regional requirements for Continuing Ed?
   - Agencies will provide and document annual Albuterol updates and competency skill testing for all active providers. An update packet will be provided by REMO soon.
BACKGROUND
The New York State Emergency Medical Advisory Committee (SEMAC) has approved the use of glucometers and nebulized albuterol by Emergency Medical Technicians (EMT) who are employees/volunteers of an EMS agency (i.e. ambulance service, ALS-FR, BLS-FR). The SEMAC approval was granted with the specific condition that the EMS agency wishing to use a glucometer or nebulized albuterol, be granted approval by the Regional Emergency Medical Advisory Committee (REMAC), that each EMT from that EMS agency complete a REMAC approved training program, and that the EMS agency be granted a Limited Service Laboratory Registration (for blood glucometry only).

The purpose of this policy is to explain the approval process for EMS agencies wishing to implement a nebulized albuterol and/or blood glucometry program.

- Prehospital blood sugar evaluation is intended to assist in the recognition of hypoglycemia and improve the speed with which proper treatment is received.

- Nebulized albuterol, when administered under the Statewide BLS Adult and Pediatric Treatment Protocols has been shown to decrease respiratory distress in patients between one and sixty-five years of age who are experiencing an exacerbation of their previously diagnosed asthma.

AUTHORIZATION FOR BLOOD GLUCOMETRY AND/OR NEBULIZED ALBUTEROL
Each REMAC will adopt protocols which will allow an EMT to obtain a blood sample, using a lancet device or equivalent, and test the blood sample in a commercially manufactured electronic glucometer. The REMAC will determine the type and level of record keeping and quality assurance required for both blood glucometry and/or nebulized albuterol. Please note that a protocol for nebulized albuterol has been approved by SEMAC and is included in the Statewide BLS Adult and Pediatric Treatment Protocols for EMT-B and AEMT.

To be authorized to use an electronic glucometer or nebulized albuterol, the EMS agency must make written request to the appropriate REMAC. The request must include, but not necessarily be limited to, the following items:

- A letter from the EMS agency physician medical director supporting the request and indicating an understanding of their role in the Clinical Laboratory requirements (blood glucometry only) and quality assurance process.
• A completed NYS Department of Health Clinical Laboratory Evaluation Program Limited Service Laboratory Registration Application (form DOH-4081) for blood testing licensure (blood glucometry only).

• Written policies and procedures for the operation of the glucometer and storage and maintenance of nebulized albuterol that are consistent with applicable Regional and State protocols. These policies and procedures shall include, but not necessarily be limited to the following:
  • didactic and psychomotor objectives for training of authorized users including who will be authorized to conduct this training;
  • documentation and attendance records of the training of authorized users;
  • a defined quality assurance program, including appropriateness review by the EMS agency physician medical director;
  • documentation of control testing process (blood glucometry only);
  • written policies and procedures for storage of the glucometer and/or nebulized albuterol, and proper disposal of sharps devices (blood glucometry only);
  • notice to the EMS agency physician medical director of the use of the glucometer and/or nebulized albuterol, and;
  • requirements for documentation when the glucometer and/or nebulized albuterol is used for patient care.

LIMITED LABORATORY REGISTRATION FOR BLOOD GLUCOMETRY

New York State Public Health Law requires that any EMS agency testing blood glucose, whether by electronic glucometer or chemstrip, be required to possess a Limited Service Laboratory Registration. In order to obtain the Registration, EMS agencies must complete and submit the following document:

• Limited Service Laboratory Registration Application (form DOH-4081)

Information and application materials are available at:

   http://www.wadsworth.org/labcert/limited/index.htm

   No EMS agency may engage in the testing of blood glucose without a Limited Service Laboratory Registration Certificate.

NOTIFICATION

Once the EMS agency has received written approval for blood glucometry and/or nebulized albuterol from the REMAC, the EMS agency must provide BEMS with an updated and signed Medical Director Verification Form (form DOH-4362), indicating the Limited Laboratory Registration permit number (if applicable) and authorization by the EMS agency physician medical director.

Issued and authorized by the Bureau of EMS Acting Director
Purpose
Due to the unique nature of the prehospital environment, medications and intravenous fluids that are stored and used in the prehospital setting are subjected to extreme environmental changes. This may have a negative impact on the stability, strength, quality and purity of these medications. As a result, medications may become less effective or may negatively impact the patients. Programs should be implemented with regards to how medications and intravenous solutions are stored in the EMS stations and vehicles. This policy applies to all BLS and ALS agencies that carry medications and/or intravenous fluids.

Policy
In an effort to assist agencies in maintaining the integrity of prehospital medications and intravenous fluids, the following should be the minimum requirements implemented by each service authorized to carry prehospital medications and intravenous fluids.

- All EMS services authorized by the Regional Emergency Medical Advisory Committee (REMAC) to carry medications and intravenous fluids must develop policies to define the appropriate storage and maintenance of all medications and intravenous fluids. These policies should also be incorporated into the agency’s policies and procedures as well as the QI program.

- All medications and intravenous fluids must be stored in an environment that protects them from extreme temperature changes and light according to each medication manufacturer’s guidelines. This includes all vehicles, stationary cabinets or any other storage facilities where medications and intravenous fluids are stored. According to manufacturer’s guidelines, most medications must be stored at temperatures that range from 59 degrees to 77 degrees Fahrenheit. However, the temperature ranges may differ for many medications.

- Agencies must have policies related to the recognition, destruction and replacement of medication that have been exposed to conditions outside or have surpassed the printed expiration date as required by the manufacture’s guidelines.

- Agencies must routinely monitor and record the temperatures for all locations where medications and intravenous solutions are stored.

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1 New Jersey – Drug Adulteration Study, October, 1995