Advanced Life Support in Obstetrics

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The American Academy of Family Physicians wishes to acknowledge the initial development of the ALSO® Program by the University of Wisconsin Department of Family Medicine, and the original national ALSO® Development Group of family physicians, obstetricians, and nurses, which formed in 1991. The program was developed under the leadership of James R. Damos, M.D., the originator of the ALSO® concept, with help from John W. Beasley, M.D. The American Academy of Family Physicians acquired the ALSO® Program in 1993.

This is the fourth edition of the ALSO® Course Curriculum. Levels of evidence have been added for recommendations and references used in the new curriculum. The curriculum demonstrates the evidence, and quality of that evidence, on which any recommendations of care are based.
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Preface

Fourth Edition

The ALSO® Provider Course is an educational program designed to assist health professionals in developing and maintaining the knowledge and skills needed to effectively manage the emergencies which arise in maternity care. The course includes required syllabus reading, lectures and hands-on workstations. Evaluation is by a written exam and skills assessment stations.

There are many appropriate ways of managing emergencies. The treatment guidelines presented in ALSO® do not necessarily represent the only way to manage problems and emergencies. Instead, these guidelines are presented as reasonable methods of management in obstetrical emergencies. Each maternity care provider must ultimately exercise his or her own professional judgement in deciding on appropriate action in emergency situations. Completion of the ALSO® Provider Course does not imply competency to perform the procedures discussed in the course materials.

Overall Course Objectives

1. Discuss methods of managing pregnancy and birth urgencies and emergencies, which may help standardize the skills of practicing maternity care providers.

2. Demonstrate content and skill acquisition as demonstrated by successful completion of the course written examination and megadelivery testing station.

CDC Recommendation

The Centers for Disease Control recommend universal precautions be used in all situations where a risk of exposure to blood or bodily fluids is present, and the potential infectious status of the patient is unknown. All bodily fluids (blood, urine stool, saliva, vomitus, ect.) should be treated as potentially infectious. Universal precautions should always be followed in pregnancy and birth care.

Copyright

The American Academy of Family Physicians (AAFP), owns the ALSO® copyright and trademark on all of the course materials, including the syllabus, slide set and written examination. Use of portions of the materials outside of an authorized ALSO® course is strictly prohibited without prior written approval from the AAFP.
Course Disclaimer

Fourth Edition

The material presented at this course is being made available by the American Academy of Family Physicians for educational purposes only. This material is not intended to represent the only, nor necessarily best, methods or procedures appropriate for the medical situations discussed, but rather is intended to present an approach, view, statement, or opinion of the faculty which may be helpful to others who face similar situations.

The AAFP disclaims any and all liability for injury, or other damages, resulting to any individual attending this course and for all claims which may arise out of the use of the techniques demonstrated therein by such individuals, whether these claims shall be asserted by physician, or any other person.

Every effort has been made to assure the accuracy of the data presented at this course. Physicians may care to check specific details, such as drug doses and contraindications, etc., in standard sources prior to clinical application.

This Course has been determined to be a Level 1 classification under the AMA/PRA Credit and Classification Guidelines. The AAFP does not certify competence upon completion of the ALSO® Provider Course, nor does it intend this course to serve as a basis for requesting new or expanded privileges.
The 2000 ALSO® Syllabus revision used many resources to evaluate the available literature. Authors and editors conducted searches of the Cochrane Library, resources from the American College of Obstetricians and Gynecologists and the Society of Obstetricians and Gynecologists of Canada, the U.S. Preventive Services Task Force, and the Canadian Task Force on Preventive Health Care. Various databases, including but not limited to MEDLINE, PUBMED, and OVID, were also searched. Meta-analyses were graded according to the quality of the studies on which the analyses were based, i.e., if the meta-analysis pooled properly randomized controlled trials, then it was assigned a Level I rating. Studies were reviewed and evaluated in a collaborative effort by the authors and the ALSO Editorial Staff with the Level of Evidence Editor as the final referee.

The quality of the studies was evaluated according to the U.S. Preventive Services Task Force and the Canadian Task Force on Preventive Health Care criteria:

### Levels of Evidence

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
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<tr>
<td>Level I</td>
<td>Evidence from at least one randomized controlled trial.</td>
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<tr>
<td>Level II-1</td>
<td>Evidence from well designed controlled trials without randomization.</td>
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<tr>
<td>Level II-2</td>
<td>Evidence from well designed observational studies, eg., case control or cohort studies, preferably from more than one center or research group.</td>
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<tr>
<td></td>
<td>Cohort study: individuals who have already been exposed to the risk factor or intervention are compared to individuals who have not been exposed to the risk factor or intervention and are followed longitudinally to observe for differences in outcome.</td>
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<td></td>
<td>Case control study: researchers review cases assembled on the basis of their outcome (disease), and compare them with controls to determine whether there is an association between a disease and an exposure.</td>
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<tr>
<td>Level II-3</td>
<td>Time series with or without intervention and dramatic results from uncontrolled studies.</td>
</tr>
<tr>
<td>Level III</td>
<td>Expert opinion, clinical experience, descriptive studies, case reports, reports of expert committees.</td>
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</table>
From these ratings come an assessment of the strength of the recommendation, which you will see in the text and summarized in a table at the end of each chapter, as follows:

**Strength of Recommendation**

- **Category A** There is good evidence to support the recommendation.
- **Category B** There is fair evidence to support the recommendation.
- **Category C** There is insufficient evidence to support the recommendation, however the recommendation may be made on other grounds.
- **Category D** There is fair evidence against the recommendation.
- **Category E** There is good evidence against the recommendation.

Generally, Level I data was necessary for a Category A recommendation, and at least Level II evidence was necessary for a Category B recommendation. However, an exact correlation does not always exist between the strength of the recommendation and the level of evidence, i.e., Level I evidence does not necessarily lead to a Category A recommendation. The evidence may be of high quality but not prove that the recommendation is effective. A Category C recommendation may occur if high quality data has produced conflicting results, available studies are not adequate to determine effectiveness, or studies of the effectiveness are not available. The recommendations are referenced with those citations that lend primary support to the strength of recommendation, though other criteria were also evaluated, e.g., burden of illness, characteristics of the intervention, and effectiveness of the intervention as demonstrated by the published literature.
The AAFP has selected, and provided funding for, all authors and editors of this syllabus. According to AAFP policy, all relationships between authors, editors and proprietary entities that may have a direct interest in the subject matter of their work will be disclosed.

Janice Anderson, M.D., has disclosed that she has received a $5,000 grant from the March of Dimes to support a local Family Centered Maternity Care Conference.

Steve Ratcliffe, M.D., has disclosed that he has an affiliation/financial interest with Hanley and Belfes; Publishers, as Chief Editor of the book “Prenatal and Perinatal Care in Family Practice”.

The following authors and editors have returned disclosure forms indicating they have no affiliation or financial interest in any organization(s) that may have a direct interest in the subject matter of this continuing medical education presentation.

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Declaration

The ALSO® Program is based on an adult learning model whereby participants prepare through advanced reading of the ALSO® syllabus and take responsibility for their own learning before and during a provider course.

Instructors, course directors and advisory faculty, are expected to approach learners in a positive, constructive, and respectful manner and to have demonstrated these attributes during the training of new providers. The ALSO® program requests and expects honest feedback to instructors regarding their effectiveness. The program reserves the right to remediate or terminate instructor-status of individual faculty who do not model these attitudes and approaches.
Evidence policy for the ALSO Syllabus 2005 – Present Revision Update and One Page Evidence Based Addendums

1. The ALSO syllabus will use the Strength of Recommendation Taxonomy (SORT) endorsed by the American Family Physician and other primary care journals.  

2. A Summary of Recommendations will follow each chapter and will form the basis of the one page chapter updates.

   There should be 6-12 summary recommendations per chapter, proportional to the amount of material covered in the chapter and the amount of evidence available.

   In deciding which points to choose for summary recommendations, authors should give priority to recommendations that are high quality (SORT A).

   SORT B recommendations can also be included when they have important clinical implications or relate to common clinical practices.

   SORT C recommendations WILL ONLY warrant mention in the Summary, if the author feels there is exceptional relevance for clinical practice and it’s important for clinicians to know that only lower level evidence is available.

3. Each recommendation should include the reference number(s) for the article(s) that is the original source of the evidence.

4. ALSO editors are available to assist authors in assigning SORT evidence levels to the summary recommendations.

5. For the one page addendums, only SORT A and SORT B recommendations will be cited.

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