

Committee on Sports Medicine

Recommendations for Participation in Competitive Sports

The preparticipation physical examination is a frequent reason for adolescent visits to a pediatrician. The most commonly used list of disqualifying conditions, published by the American Medical Association, was last revised in 1976.¹ It has become increasingly obsolete because of changes in both safety equipment and society's attitudes toward the rights of athletes to compete despite a medical condition that may increase the risk of sustaining an injury or aggravating a

preexisting medical condition. Most, if not all, sports are associated with some risk. The physician, the athlete, and the parents must weigh whether the advantages gained by participating in athletics are worth whatever risks are involved.

To assist practitioners in deciding whether athletes should be allowed to participate in particular sports, the American Academy of Pediatrics' Committee on Sports Medicine has compiled a list of recommendations. First, sport events were divided into groups depending on their degree of strenuousness and probability for collision (Figure). These groups of sports were then assessed in light of common medical and surgical conditions to determine whether participation would create a substantial risk of injury (Table).

Certain activities, such as skiing, are not inherently "contact sports." Yet, when competitors

This statement has been approved by the Council on Child and Adolescent Health

The recommendations in this statement do not indicate an exclusive course of treatment or procedure to be followed. Variations, taking into account individual circumstances, may be appropriate.

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| Contact/Collision | Limited Contact/Impact | Noncontact | | |
|-------------------|------------------------|-----------------|----------------------|--------------|
| | | Strenuous | Moderately Strenuous | Nonstrenuous |
| Boxing | Baseball | Aerobic dancing | Badminton | Archery |
| Field hockey | Basketball | Crew | Curling | Golf |
| Football | Bicycling | Fencing | Table tennis | Riflery |
| Ice hockey | Diving | Field | | |
| Lacrosse | Field | Discus | | |
| Martial arts | High jump | Javelin | | |
| Rodeo | Pole vault | Shot put | | |
| Soccer | Gymnastics | Running | | |
| Wrestling | Horseback riding | Swimming | | |
| | Skating | Tennis | | |
| | Ice | Track | | |
| | Roller | Weight lifting | | |
| | Skiing | | | |
| | Cross-country | | | |
| | Downhill | | | |
| | Water | | | |
| | Softball | | | |
| | Squash, handball | | | |
| | Volleyball | | | |

Figure. Classification of sports.

TABLE. Recommendations for Participation in Competitive Sports

| | Contact/ Collision | Limited Contact/Impact | Noncontact | | |
|--|-----------------------|---------------------------|------------------|-------------------------|------------------|
| | | | Strenuous | Moderately Strenuous | Nonstrenuous |
| Atlantoaxial instability | No | No | Yes* | Yes | Yes |
| * Swimming: no butterfly, breast stroke, or diving starts | | | | | |
| Acute illnesses | * | * | * | * | * |
| * Needs individual assessment, eg, contagiousness to others, risk of worsening illness | | | | | |
| Cardiovascular | | | | | |
| Carditis | No | No | No | No | No |
| Hypertension | | | | | |
| Mild | Yes | Yes | Yes | Yes | Yes |
| Moderate | * | * | * | * | * |
| Severe | * | * | * | * | * |
| Congenital heart disease | † | † | † | † | † |
| * Needs individual assessment. ² | | | | | |
| † Patients with mild forms can be allowed a full range of physical activities; patients with moderate or severe forms, or who are postoperative, should be evaluated by a cardiologist before athletic participation. ² | | | | | |
| Eyes | | | | | |
| Absence or loss of function of one eye | * | * | * | * | * |
| Detached retina | † | † | † | † | † |
| * Availability of American Society for Testing and Materials (ASTM)-approved eye guards may allow competitor to participate in most sports, but this must be judged on an individual basis. ^{3,4} | | | | | |
| † Consult ophthalmologist | | | | | |
| Inguinal hernia | Yes | Yes | Yes | Yes | Yes |
| Kidney: Absence of one | No | Yes | Yes | Yes | Yes |
| Liver: Enlarged | No | No | Yes | Yes | Yes |
| Musculoskeletal disorders | * | * | * | * | * |
| * Needs individual assessment | | | | | |
| Neurologic | | | | | |
| History of serious head or spine trauma, repeated concussions, or craniotomy | * | * | Yes | Yes | Yes |
| Convulsive disorder | | | | | |
| Well controlled | Yes | Yes | Yes | Yes | Yes |
| Poorly controlled | No | No | Yes [†] | Yes | Yes [‡] |
| * Needs individual assessment | | | | | |
| † No swimming or weight lifting | | | | | |
| ‡ No archery or riflery | | | | | |
| Ovary: Absence of one | Yes | Yes | Yes | Yes | Yes |
| Respiratory | | | | | |
| Pulmonary insufficiency | * | * | * | * | Yes |
| Asthma | Yes | Yes | Yes | Yes | Yes |
| * May be allowed to compete if oxygenation remains satisfactory during a graded stress test | | | | | |
| Sickle cell trait | Yes | Yes | Yes | Yes | Yes |
| Skin: Boils, herpes, impetigo, scabies | * | * | Yes | Yes | Yes |
| * No gymnastics with mats, martial arts, wrestling, or contact sports until not contagious | | | | | |
| Spleen: Enlarged | No | No | No | Yes | Yes |
| Testicle: Absence or undescended | Yes* | Yes* | Yes | Yes | Yes |
| * Certain sports may require protective cup. ³ | | | | | |

fall and collide with the ground, they are as much at risk as participants in the more traditional collision/contact sports. Hence, we have included such sports in a group called "limited contact/impact."

A list of all medical conditions that would disqualify athletes from participation would be

nearly endless. Therefore, a concise table that can be consulted quickly and easily was thought to be most helpful. These, then, are the committee's recommendations for sports participation, to be referred to when the physician examines a young person with one of the listed conditions. Our recommendations should only be used as a guideline;

the physician's clinical judgment should remain the final arbiter in interpreting these recommendations for a specific patient.

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