

# Unit 4 SPORTS MEDICINE

## Task 1 Speaking

**Brainstorm the issues that sports medicine deals with.**

## Task 2 Read the text about exercise-induced asthma and think of a suitable heading for each paragraph

1) Exercise-induced asthma (EIA) describes the narrowing of airways that occurs in association with physical exertion. EIA occurs in 90% of asthma sufferers, but also affects a proportion of otherwise "healthy" individuals and appears to be very common in athletes. Current estimates suggest that up to 50% of athletes may be affected.

2) In athletes, the diagnosis of EIA is particularly important because of potential implications on performance and health. EIA is a recognized cause of sudden death in sport and, untreated, may have long-term implications for structure and function of the airways. In addition, strict regulations concerning the use of medications by competitive athletes mean that ensuring accurate diagnosis is crucial.

3) Surprisingly, symptoms during exercise (e.g. wheeziness and tight chest) are a poor indicator of actual airway narrowing. Since diagnosis of EIA is often made on symptoms alone this could potentially result in a peculiar situation where EIA is:

- *overdiagnosed* in athletes who report symptoms but who do not have airway narrowing
- *underdiagnosed* in athletes with no symptoms (asymptomatic) but who have narrowing of the airways that can still affect their performance

Studies in elite athletes support this and have led to many top sports teams screening their athletes for EIA (e.g. Australian and British Olympic Teams).

From the point of view of the athlete, the main reason to screen for EIA is that the condition may have detrimental effects on athletic performance. EIA is already known to reduce exercise capacity, particularly peak  $\text{VO}_2$  and running speed in cold environments and may compromise not only performance during competition but capacity to train effectively.

Supporters of screening also argue that correctly diagnosing EIA has important implications for the health of athletes, with one study showing asthma as a significant risk factor for unexplained death. In addition, a high proportion of asthma-related deaths occur in athletes during, or soon after, a sporting event.

4) Pharmacological and nonpharmacological therapies have been used successfully in the treatment of EIA. Medications shown to improve  $\text{FEV}_1$  response include inhaled  $\beta_2$ -agonists, inhaled corticosteroids, cromolyn compounds, and leukotriene modifiers. Other studies have also highlighted the importance of dietary manipulation as an adjunctive intervention. However, there is no clear consensus as to the optimum treatment. Nevertheless, it is generally acknowledged that  $\beta_2$ -agonist medication should be accompanied by an inhaled corticosteroid, because this helps to prevent persistent use of  $\beta_2$ -agonist therapy and also work against potential airway remodelling that may occur.

(<http://www.sportasthma.co.uk/eia.html>)

**After you read.**

**Match the words below to form collocations:**

sudden	effect
accurate	exertion
current	factor
physical	diagnosis
detrimental	death
risk	estimates

### **Task 3 Questions**

Complete the sentences.

- a) Sports medicine deals with .....
- b) Asthma affects .....
- c) EIA causes .....
- d) The treatment of EIA includes .....

Check your answers in pairs, ask about each of the sentences above:

- a) ..... ?
- b) ..... ?
- c) ..... ?
- d) ..... ?

There are two main ways of asking questions - directly and indirectly. Both have the same meaning but we use **indirect questions** when we want to be **more polite, more formal** or **less confrontational**.

We can ask a **direct question** - Where is Brighton Pier? Or to be more formal or polite, we can ask an **indirect question** - I wonder if you could tell me where Brighton Pier is?

When we create indirect questions, the question (What time is it?) becomes part of a longer sentence or questions (Do you know... ?) and the word order changes from the order of a direct question. For example:

**Direct:** What time is it?

**Indirect:** Do you know what time it is?

**Direct:** Why was he late?

**Indirect:** Can you tell me why he was late?

**Direct:** When does the lesson end?

**Indirect:** Could you tell me when the lesson ends?

**Direct:** Is she French?

**Indirect:** Do you know whether/if she is French?

**Exercise: Transform the questions into indirect speech.**

1. Why did she cry? - I don't really know \_\_\_\_\_ .
2. Does she speak Greek? - I will ask her \_\_\_\_\_ .
3. Where is Joe? - I have no idea \_\_\_\_\_ .
4. Is he all right? - I do not know \_\_\_\_\_ .
5. What did he want? - I'm afraid I can't tell you \_\_\_\_\_ .
6. Whose car was it? - I'm not quite sure \_\_\_\_\_ .
7. Is this the right train? - Let's ask someone \_\_\_\_\_ .
8. Can you tell me what \_\_\_\_\_ ? - Her name is Maggie.

**Task 4 Word formation**

Use the word at the end of each line to form a word that fits in the space in the same line.

**Happy is healthy**

Medical research has found that ..... has a strongly beneficial effect on health. The healing properties of ..... are such that humour is now being used alongside more ..... courses of ..... in some hospitals. In a London's children's hospital, for example, two clowns are provided for the ..... of patients. Doctors say that these clowns are ..... in making the children feel better.

- HAPPY
- LAUGH
- TRADITION
- TREAT
- ENTERTAIN
- SUCCESS

It seems that when we laugh, there can be a ..... in both blood pressure and the amount of ..... in our muscles. Although it is ..... to prove it at the moment, this may also mean that people who feel unhappy and who are, therefore, ..... to laugh so much, suffer more often from physical .....

- REDUCE
- TENSE
- POSSIBLE
- LIKELY
- ILL

**Form nouns from the verbs**

- Observe .....
- Explain .....
- Recommend .....
- Argue .....
- State .....
- Advice .....
- Describe .....
- Emphasise .....
- Compare .....
- Analyse .....
- Increase .....