Screening limits policy

Over time, ongoing research and development and the introduction of new technologies by racing laboratories means that analytical equipment and methods improve, resulting in increased sensitivity of analysis in the testing of prohibited substances, and therefore lower limits of detection. Increased sensitivity of analysis means that a substance present in a sample at a certain concentration which was not able to be detected in the year 2000 may be able to be detected using the analytical equipment and methods available in 2012.

In the case of illicit performance-modifying substances which have no legitimate role or accepted therapeutic use in racehorses, increased sensitivity of analysis is a positive development. It is vital that the racing laboratories harness the full capabilities of modern science to detect the presence of such substances at any level.

However, as a matter of policy the Australian Racing Board does not believe it is necessary to employ highly sensitive methods of analysis for those therapeutic substances which do have a legitimate place in the racing industry, including for welfare reasons.

It is for this reason, as well as the desire for objectivity, transparency and international harmonisation that the concept of screening limits for certain therapeutic substances has been developed. The therapeutic substances assigned screening limits are some commonly-used equine medications representing a range of therapeutic classes, including nonsteroidal antiinflammatory drugs, corticosteroids, local anaesthetics and tranquillisers.

Screening limits

Along with most other international racing jurisdictions, the Australian Racing Board has approved the development of formal screening limits for certain therapeutic substances. These therapeutic substances include phenylbutazone, flunixin and lignocaine as examples. The screening limit is the concentration of a particular therapeutic substance (or its metabolite) in urine or plasma above which the racing laboratory will call the sample positive. Their adoption will be facilitated by the introduction of new Rule AR.178EA.
Each screening limit has been derived from previous administration studies involving horses, followed by a risk analysis consisting of two components: a risk assessment (evaluation of the effect of the substance and factors related to its control) and a risk management (decision step for harmonisation). Screening limits are harmonised detection limits agreed following input by international consensus and are conveyed by instruction from racing authorities to their racing laboratories. The screening limits are simply the detection limits to be used by the laboratories when screening for certain specified therapeutic substances; they are not international thresholds. When the screening procedure in the first laboratory indicates the screening limit for the particular substance has been exceeded, all that is required is qualitative confirmatory analysis (usually by mass spectrometry) to confirm the presence of the prohibited substance. Similarly, when the reserve portion of the sample is referred to the second (referee) laboratory, all that is required is qualitative confirmatory analysis to confirm the presence of the prohibited substance.

**Screening limits do not affect liability**

The implementation of screening limits in racing is not intended and does not operate to mean that for the purpose of the Rules of Racing the therapeutic substance only becomes a prohibited substance if and when the screening limit is exceeded.

It shall not be a defence to any charge under AR.177, AR.177A or AR.178 that the result of any initial screening test should have been below the screening limit for the therapeutic substance in question.”

**Advice of detection periods**

Industry participants are advised that more information on the detection periods for many of the therapeutic drugs assigned screening limits will be shortly made available. It is anticipated that a series of “Fact Sheets” will be produced by the consortium that was responsible for the 2012 RIRDC research publication entitled “The Pharmacokinetics of Equine Medications” for those therapeutic substances studied that have a screening limit.

In making any decision regarding the administration of a prohibited substance to a horse that is entered to race, industry participants are reminded of their responsibilities in undertaking the appropriate level of due diligence and risk analysis in researching the available information on detection periods, including the seeking of veterinary advice and adding an adequate safety margin. Participants are advised to take a conservative approach, and consider all variables such as dose, length of treatment and route of administration, when calculating withdrawal times for therapeutic substances where information on detection times is available.

Participants are also advised that a best-practice approach would dictate that no medication, irrespective of its detection period, should be given within 2 clear days of racing.