WHAT IS AGE GRADING?

For Masters, Age Grading acknowledges that we all lose strength and speed with age. Age grading uses tables to theoretically put all competitors, regardless of age and sex on an equal basis. It allows performances to be corrected to what would have been achieved in a competitor's prime years and permit comparisons to be made between people of different ages, sex and event. They also provide percentage values for an event which enables comparison of performance against the standard for the age now, and to keep track of progress over time.

The first age-graded tables were produced in 1989 by WAVA (now WMA) and contained *Age-Factors and Age-Standards.* They were revised and updated in 1994 to include younger age groups, and again updated in 2003, 2006 and 2010. They now include data for ages 8 to 100 with ages 20 to 29 regarded as "open" and where no age grading applies. Age-Factors are used to convert performances to equivalent "open" performances and Age-Standards are world-best performances for each event for each year of age.

The Derivation of Age-Standards

Large amounts of results were analysed and for each event were subjected to statistical analysis to determine a consistent curve between the best performances at all ages. These curves were used to determine the Age-Standards for each event in one-year divisions, with 100% being an approximation (or usually just over) of the world-best performance at that age. These Age-Standards apply to individual years and are therefore not the same as master's world records, as these are determined as the best performance in a 5-year age group. Hence someone who is in the later years of an age group may well record over 100% without breaking a world record.

The Derivation of Age-Factors

Age factors are established using the world's best "open" performance or world "open" record (at the time) and the age standards developed for individual ages.

Age-Factor = World Best / Age-Standard

For runs and walks the Age-Factors will be 1 or less (declining progressively with age), while for throws and jumps the Age-Factor will be 1 or more (increasing progressively with age).

How is the Information Used

Age-Factors and Age-Standards can be used in two major ways:

1. An equivalent "open" athletic performance can be generated using Age-Factors as follows:

   Equivalent Open performance = Actual performance x Age-Factor (for an event & age)

   e.g. a woman of 53 runs 10K in 45.18.
   The 10K age-factor for a woman of 53 is .8425.
   Therefore, multiply 45.18 (2718 seconds) by .8425, which gives 38.09.9 as her equivalent open performance time.

2. An Age-Graded percentage for a performance is generated using Age-Standards. This age-grading allows comparison against the world age-standard. Age-Graded percentages are calculated as follows:

   Runs & walks: Age-Graded percentage = Age-Standard / Actual performance x 100

   Throws & jumps: Age-Graded percentage = Actual performance / Age-Standard x 100

e.g. using the woman of 53 who ran 10K in 45.18.
The 10K age-standard for a women of 53 is 35.01 (2137.79seconds).
Divide this by 45.18 (2718 seconds), and you get 78.65% as her age-graded performance.

Application of this information

1. Tracking performance. You can use the age-grading to track your own performances. You can compare your best effort at age 45 to your best at 50 and 55, and so on. While your actual time may be slower, your age-grading could show that your performance is maintained or even improved. This has particular significance for athletes who only took up the sport in their later years.

2. Setting goals. By checking the tables you can set performance levels. You can either set out to achieve the same age graded performance, or by setting a higher age graded performance level – determine the necessary time or distance. Having attained a certain age-grading in one event you can use that grading to find target times in other events. Training can then be geared towards these targets.

3. Make comparisons. Using age-grading you can make comparisons with other athletes, men and women, irrespective of age. These comparisons are most relevant in the same event or similar events. However they become less so as the event differs e.g. comparing age-grading of the half marathon with the pole vault. You can also convert your time to its equivalent as an open athlete.

4. If you are new to master's athletics you may like to know where you stand relative to others locally and further afield. You may also be thinking about competing interstate or overseas. Your age –grading will give you an idea of how competitive you could be. The following age graded percentage levels provide a broad guide to relative performance levels:

   Over 100% = approximate world record level
   Over 90% = world level
   Over 80% = national level
   Over 70% = state level
   Over 60% = regional level

5. SAMA Awards. On an annual basis Age grading is used to assess times and distances at scratch events to determine the most outstanding athlete in each of the runs, walks, jumps and throws.

Conclusion

Age grading is not without criticism. It can be fairly argued that it is considerably easier for say a moderate sprinter to achieve a comparatively high Age-Graded percentage, than for an equivalent athlete in a technically difficult throwing or jumping event. Another viewpoint often expressed regarding age grading is that the tables are too lenient towards older masters. However, they are a good basis for comparisons between related events – i.e. sprints with sprints, jumps with jumps, throws with throws and while there are arguments for and against age-grading, they are the only objective way we have of comparing performances across a range of events and ages.