



The Medical Advisory Association to Long Distance Races and Participants Worldwide™

**IMMDA ADVISORY, 2015
PRE-RACE ASPIRIN TO PREVENT HEART ATTACK AND / OR
CARDIAC ARREST
DURING LONG DISTANCE RUNNING**

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This paper was prepared for publication by an IMMDA committee of Drs.; Lewis G. Maharam, M.D. FACSM (Chair); Bruce Adams M.D.; Adrian Lorde, MBBS, MSC.; Thiam Sun Yee, MBBS, FAFPM; Edward Maharam, M.D; Paulo Afonso Lourega de Menezes, M.D.; and Marvin Adner, M.D.

IMMDA herein updates its prior recommendation on aspirin usage to protect susceptible runners from heart attack and/or cardiac arrest during and after long distance running. [1] This advisory is to explain why the USA FDA's recommendation not to prescribe daily aspirin to low-risk individuals does not preclude usage by runners before a 10K or longer long distance event. This advisory considers new observations (both published and reported by IMMDA members) on the increasing frequency of long distance running and walking-related heart attack and/or cardiac arrest in middle-aged men since the year 2000 as follows:

- Cardiac arrests were significantly more frequent during marathons than half-marathons (yet still occurs in 10K and half marathoners), in men versus women and have increased greater than 2-fold in the latter half of a 10-year prospective registry since the year 2000. [2]
- The cause of race-related sudden cardiac deaths was reported as mainly due to atherosclerotic heart disease in males over age 40. [3,4,5,6]

Studies in asymptomatic middle-aged male runners have demonstrated a high, if transient, risk for atherothrombosis during marathons which promotes acute coronary thrombosis during or after a marathon. [7] We fully admit this research applied specifically to marathon distance, but based to IMMDA member observations and discussions, the results as to "why" can be freely extrapolated to 10K or longer distances. More research is needed to absolutely confirm the

marathon findings to other distances. Based on the above discussion, in the meantime, IMMDA recommends pre-race aspirin usage to prevent acute heart attacks and/or cardiac arrest in middle age male long distance runners only after a full discussion of risks and benefits and with approval by their personal physicians. [8,9]

Revised IMMDA Recommendation:

Long distance runners, especially men over age 40, are advised in the absence of specific contraindications to take pre-race aspirin if approved by their personal physician after discussion of its risks and benefits.

References:

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The International Marathon Medical Directors Association (IMMDA) was formed in May 1982 as The Medical Advisory Association to Long Distance Races and Participants Worldwide™ The purpose of IMMDA is to i) promote and study the health of long distance runners, ii) promote research into the cause and treatment of running injuries, iii) prevent the occurrence of injuries during mass participation runs, iv) offer guidelines for the provision of uniform marathon medical services throughout the world, and v) promote a close working relationship between race and medical directors in achieving the above four goals.

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