

**IX ENCONTRO DO INSTITUTO ADOLFO LUTZ
I SIMPÓSIO INTERNACIONAL DE VIGILÂNCIA E RESPOSTA RÁPIDA**

M-061-23 EVOLUTIONARY PATTERN OF INFLUENZA B/VICTORIA REEMERGING LINEAGE IN, SÃO PAULO, BRAZIL, 2002 – 2011.

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Resumo

INTRODUCTION - There are two lineages of influenza B viruses that show little antigenic cross reactivity, the B/Victoria/2/87- and B/Yamagata/16/88. Viruses from both of these lineages have been observed in various proportions in different countries since 1988–1989. Only one of these two lineages of influenza B virus has been included in trivalent seasonal influenza vaccines. Taking into account the fact that the co circulation of the two influenza B virus lineages has been unpredictable highlights the important task of Influenza Surveillance Network Worldwide towards preventable disease strategies. **OBJECTIVE** – To evaluate influenza B viruses strains (Yamagata/Victoria) circulation in Brazil towards to contribute with South Hemisphere vaccine composition update. **MATERIAL AND METHODS** – Respiratory specimens were obtained by the National Influenza Surveillance. Antigenic characterization was performed by WHO immune sera panel. **RESULTS** - A period of 12 years of influenza B virus surveillance demonstrates the pattern of circulation of the two influenza B/ lineages; influenza B/Victoria lineage reemerged during influenza season 2001 predominated in Brazil during 2003, 2004, 2007, 2010, 2011 and early 2012 influenza seasons; on the other hand the co circulation of the two influenza B/ lineages was demonstrated during 2002, 2005, 2006 and 2008 influenza seasons. **CONCLUSION** - The present study provides information about influenza B/Victoria lineages evolution in Brazil south hemisphere, and clarifies why vaccine match proportion decreased unexpectedly for influenza B viruses from 100% to 54%, concomitant with the implementation of Southern Hemisphere recommendations, a decrease which appears to be a coincidence related to changes in virus dynamics. This investigation clearly demonstrates the mismatch between influenza B/Yamagata lineage circulating in Brazil and the vaccine composition containing influenza B/Victoria lineage during influenza virus season 2010. Financial support: IAL, SES, MoH, CDC, WHO