



Temporal Distribution of Syphilis Serological Tests (VDRL) Demand and Positivity in a Reference Municipal Central Laboratory: Was Found Increase After Carnival?



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INTRODUCTION

Despite the advancement of medicine and the absence of penicillin resistance, syphilis/congenital syphilis remains as a serious public health problem, especially in Brazil.

OMS estimates that happens about 10,6 millions new cases of syphilis in adult people between 15 and 49 years annually in the world. The syphilis diagnosis in absence of clinical manifestations is made by serological exams. The screening is made by methods called non-treponal tests, because they aren't derived of casual agent. The most used in our middle is VDRL test.

It has long been related parties of Carnival to the permissive behavior, with components of strong sex appeal, which would lead individuals to increase the risk of contracting an STI.

OBJECTIVE

To evaluate possible seasonality relation existence between temporal distribution of demand and positivity of VDRL tests at Miguelote Viana Public Health Central Laboratory (MVPHCL) in Niteroi, Rio de Janeiro – Brazil.

METHODS

This is a temporal series analytical cross-sectional study. Data of demand, VDRL tests positivity and worked days were collected in database related to the period 2006-2010 and analyzed statistically through temporal series and hypothesis testing on tendency and seasonality. MVPHCL is reference to public health units of Niterói - Rio de Janeiro. This is an innovative research, since similar articles have not been found.

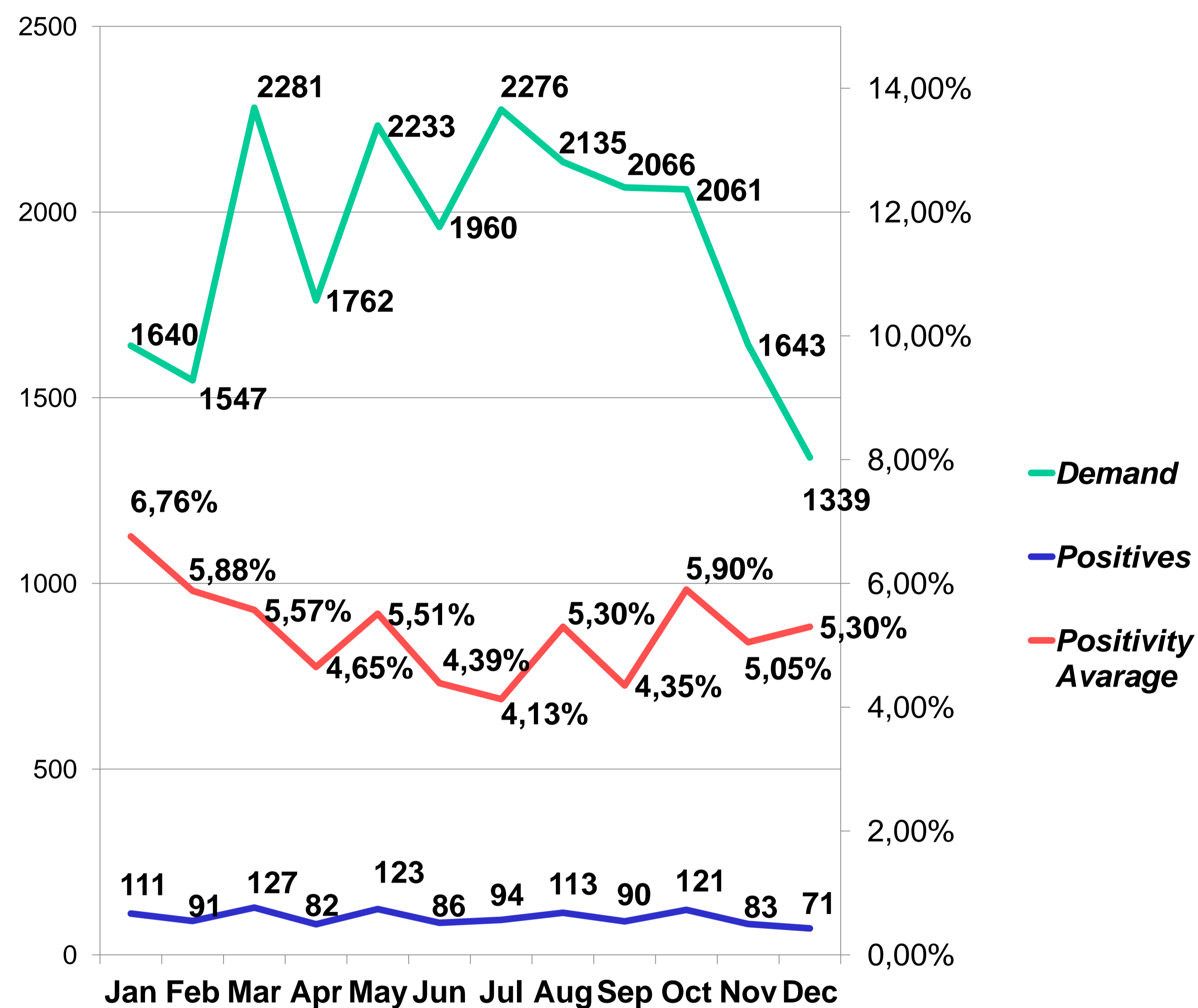
Consenting term wasn't necessary since the analyzed data were collected from codified tables.

There is no interest conflict to declare.

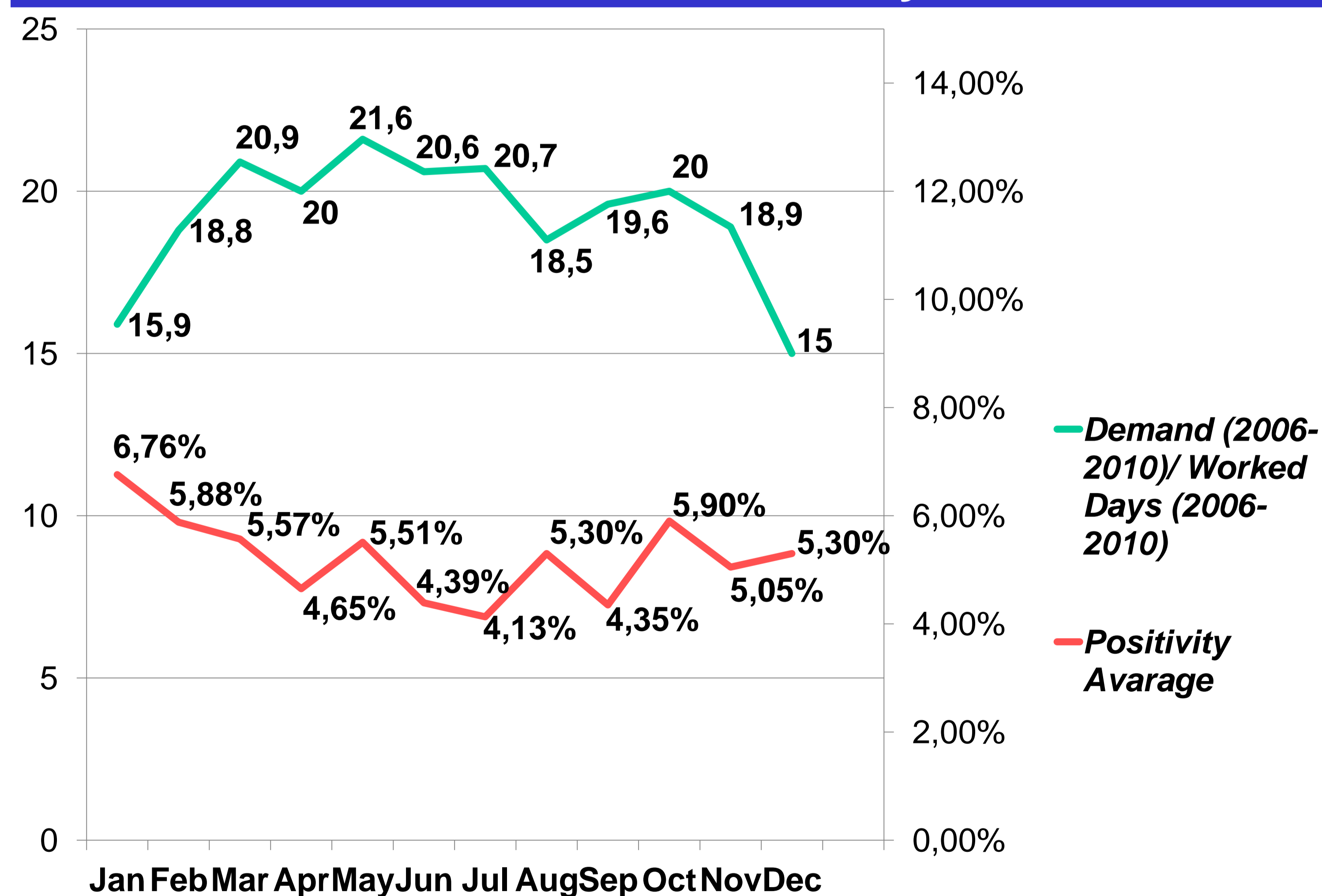
RESULTS

From January, 2006 to December, 2010, 22,943 VDRL tests were registered; on 2006: 22.85% (5,235); 2007: 20.16% (4,622); 2008: 20.15% (4,620); 2009: 19.27% (4,415) e 2010: 17.57% (4,024). Worked days by month, in annual average, were 19.5 in 2006; 19.8 in 2007; 19.6 in 2008; 19.7 in 2009 and 19.3 in 2010. Monthly average of worked days was 21.2 in January, 17.2 in February, 21.6 in March, 17 in April, 16 in May, 18.4 in June, 21.8 in July, 22 in August, 20.2 in September, 20.4 in October, 17.2 in November and 18,6 in December. Positivity annual average was in 2006: 19.83; 2007: 20.25; 2008: 21.58; 2009: 18 e 2010: 18.25. Carnival National Holiday occurred: February, 28th, 20th, 05th, 24th, 16th from 2006 to 2010, respectively.

Monthly Absolut Demand Monthly Positive Absolutes Positivity Avarage



Demand/ Worked Days



CONCLUSION

There was found no increase on VDRL tests after Carnival. We observed no seasonal relation between demand and positivity of VDRL tests. A significant statistical decrease occurred in demand tests over the studied years.