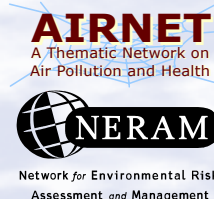


# EXPAH: CHROMOSOMAL ABERRATIONS BY FLUORESCENCE IN SITU HYBRIDIZATION (FISH)- BIOMARKER OF EXPOSURE TO CARCINOGENIC PAHs

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**AIM:** To evaluate the effect of ambient air exposure to PAHs on biomarkers of effect - cytogenetic parameters by FISH

## STUDIED GROUPS

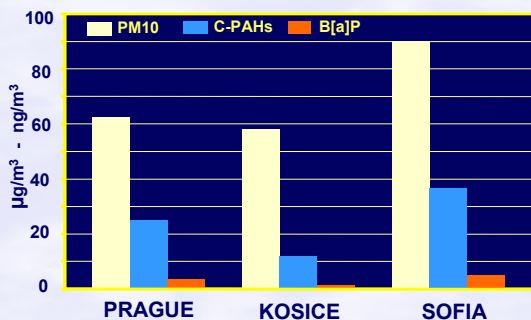
## METHODS

<b>PRAGUE</b>	Exposed : Policemen Controls: Volunteers > 90 % indoors
<b>KOSICE</b>	Exposed : Policemen Controls: Volunteers > 90 % indoors
<b>SOFIA</b>	Exposed : Policemen Bus drivers Controls: Volunteers > 90 % indoors

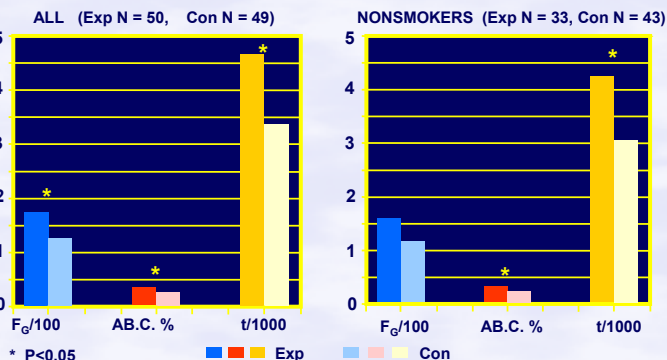
<b>FISH ANALYSIS</b>	1000 metaphases/subject Chromosome painting - #1 and #4 (Cambio, UK) Metasystem
<b>STATISTICS</b>	Student's t-test

## RESULTS

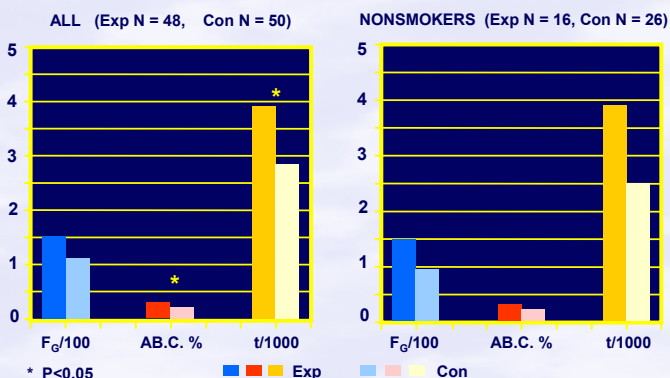
EXPOSURE TO AIR POLLUTANTS DURING WINTER SEASON



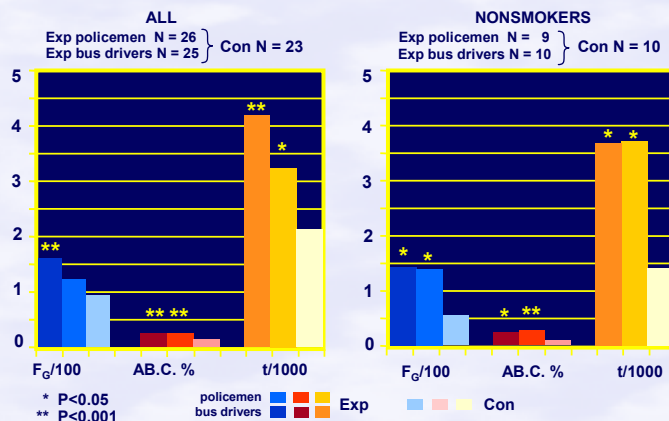
CYTOGENETIC PARAMETERS BY FISH - PRAGUE



CYTOGENETIC PARAMETERS BY FISH - KOSICE



CYTOGENETIC PARAMETERS BY FISH - SOFIA



Ambient air exposure to carcinogenic PAHs significantly increased FISH cytogenetic parameters in nonsmoking policemen and bus drivers from the center of the city of Prague and Sofia

## CONCLUSIONS

Chromosomal aberrations detected by FISH seem to be a sensitive biomarker of exposure to carcinogenic PAHs

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