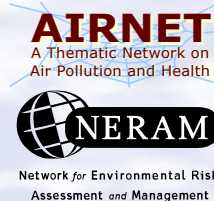


EXPAH: CHROMOSOMAL ABERRATIONS BY FLUORESCENCE IN SITU HYBRIDIZATION (FISH)- BIOMARKER OF EXPOSURE TO CARCINOGENIC PAHs

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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

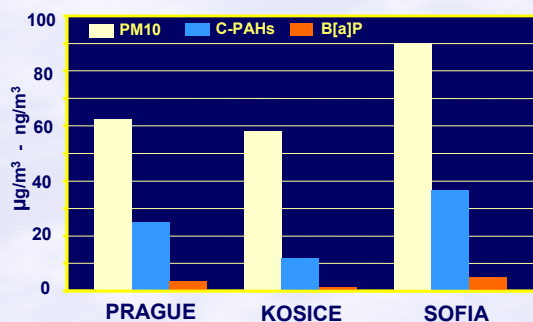
PRAGUE	Exposed : Policemen Controls: Volunteers > 90 % indoors
KOSICE	Exposed : Policemen Controls: Volunteers > 90 % indoors
SOFIA	Exposed : Policemen Bus drivers Controls: Volunteers > 90 % indoors

METHODS

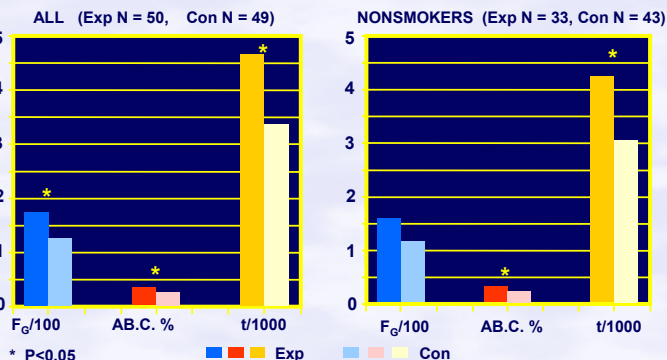
FISH ANALYSIS	1000 metaphases/subject Chromosome painting - #1 and #4 (Cambio, UK) Metasystem
STATISTICS	Student's t-test

RESULTS

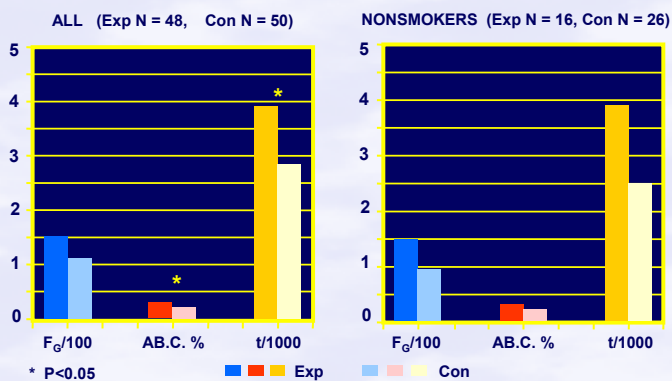
EXPOSURE TO AIR POLLUTANTS DURING WINTER SEASON



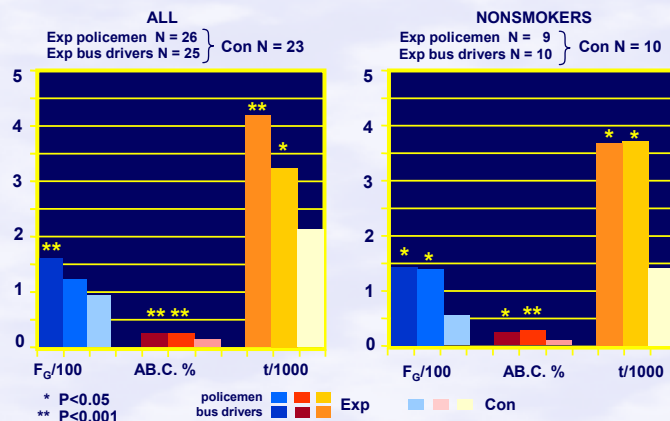
CYTOGENETIC PARAMETERS BY FISH - PRAGUE



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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