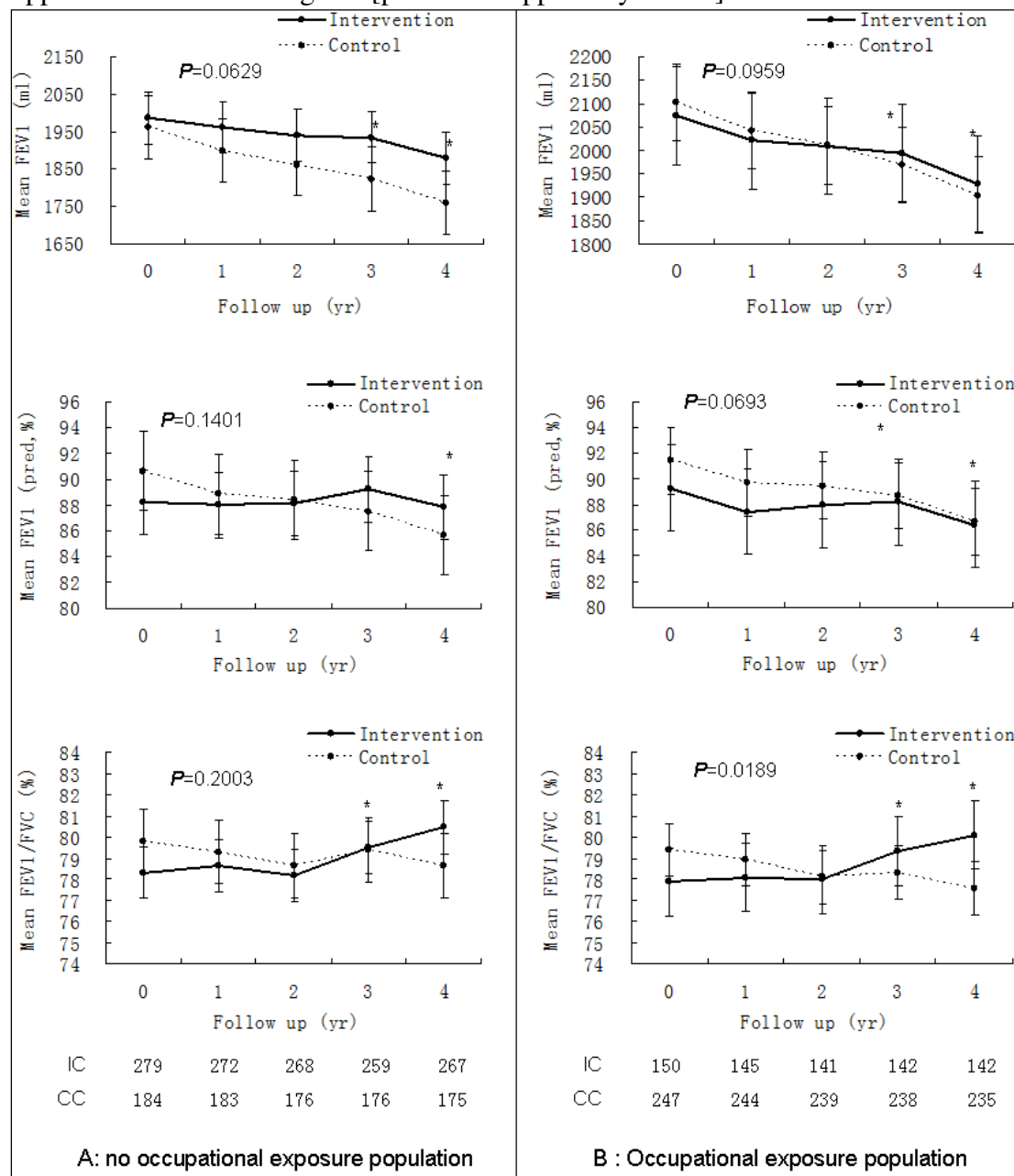Figure A   The Actual Mean (95%*CI*) of FEV_1 (ml and % predicted) and FEV1/FVC (%) over Time between Two Communities by Occupational Exposure to Dusty/gases/fumes.

IC: Intervention Community; CC: Control Community.

* marked the significant difference (*P*<0.05) between two communities in estimated mean after with adjustment for clustering effects and confounding factors (i.e. baseline FEV_1, age, gender, education, smoking status, environmental tobacco smoke, COPD and BMI).

P values in the figure referred to the comparison between two communities in rate of FEV1 and FEV1/FVC decline after adjustment for above confounders and clustering effects.

A: There was significant difference between two communities in estimated mean of FEV1 and FEV1/FVC among those subjects who had no occupational exposure to dusty/gases/fumes, with difference of 103 ml (95% *CI*: 70ml to 135ml) and 5.4 % predicted (95% *CI*: 3.7% to 7.1ml%) in FEV1 and 3.0% (95% *CI*: 1.9 % to 4.0%) in FEV1/FVC at the end of study. The adjusted annual rates of decline in FEV1 were also slower by 22ml (95% *CI*: -1ml to 45ml) and 0.9 % predicted (95% *CI*: -0.3% to 2.1%) in the intervention community than the control community, as well as FEV1/FVC by 0.5% (95% *CI*: 0.3% to 1.3%).

B: a slight difference of 47 ml (95% *CI*: 11ml to 84ml) in FEV1 and 3.5% (95% *CI*:2.4% to 4.6%) in FEV1/FVC was observed between two communities in estimated mean with respect to subjects who had occupational exposure to dusty/gases/fumes. The adjusted annual rates of decline in FEV1 were also slower by 20 ml (95% *CI*: -4ml to 44ml) and 1.2 % predicted (95% *CI*: -0.1% to 2.4%) in the intervention community than the control community, as well as FEV1/FVC by 0.9% (95% *CI*: 0.2% to 1.7%).
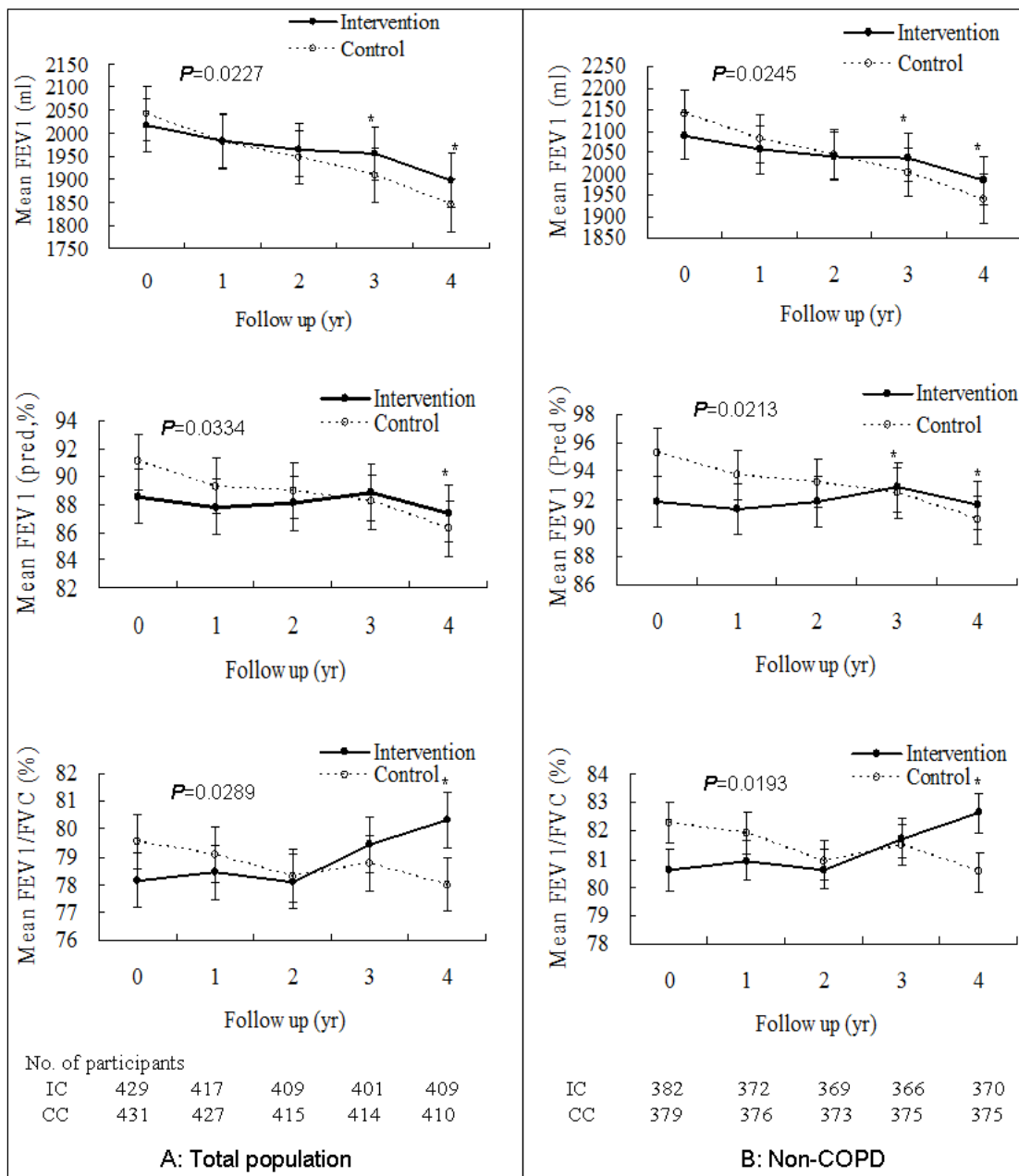
Figure B   The Actual Mean (95%*CI*) of FEV$_1$ (ml and % predicted) and FEV1/FVC (%) over Time between Two Communities among Total Population and Non-COPD Population.

IC: Intervention Community; CC: Control Community.

* marked the significant difference (*P*<0.05) between two communities in estimated mean after adjustment for clustering and confounding factors (i.e. baseline FEV$_1$ (or FEV1/FVC), age, gender, education, smoking status, environmental tobacco smoke, COPD, BMI, and occupational exposure to dusty/gases/fumes exposure).

P values in the figure referred to the comparison between two communities in rate of FEV1 and FEV1/FVC decline after adjustment for above confounders and clustering effects.

A: In total population, there was significant difference between the two communities in estimated mean at the end of study, with a difference of 71 ml (95% *CI*: 47ml to 94ml) and 3.0 % predicted (95% *CI*: 1.7% to 4.2%) and 3.1% (95% *CI*: 2.4% to 3.9%) in FEV1/FVC at the end of study.

B : In non-COPD subjects, intervention community had showed significant difference in estimated mean in comparison to control community at the end of study, with a difference of 85 ml (95% *CI*: 61ml, 110ml) and 4.3% predicted (95% *CI*: 3.0% to 5.6%), and 3.0% (95% *CI*: 2.3% to 3.8%) in FEV1/FVC at the end of study.