Developing the Future

THE AIR THAT WE BREATHE IN – HOW IT AFFECT US

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The choice is ours!

The choice is stark! Carrying on with what we are doing and destroying the world or taking drastic actions and leaving a better world for our next generations

Why Air Quality People Chamber? And Why an Independent Local Office for Measuring pollutants

Why Coventry and Warwickshire Air Quality People's Chamber (C&W AQPC)

- C&W AQPC is an independent body composed of representatives of resident associations, academics, Councillors, medical profession and pollution specialists

- The Chamber was formed to gather bona fide data to help all concerned to make the right decisions on ways to improve air quality in our towns and cities

- There is a need for more and more accurate monitoring, which our group can do, and which can be used to support the work already in place in Warwick District Council and wider afield

- The intention and our desire are to work closely with local councils and the Government agencies on way to improve the air quality

A Local Independent Office for Monitoring Air Quality Locally

The purpose of establishing a People Chamber for Air Quality Measuring and Monitoring, and an office for it, are:

- To gain a wider understanding of the effects of Poor Air Quality
- To understand what we currently measure and consider its adequacy
- To communicate the above understanding to the widest possible audience
- To share the evidence based on the health and social impacts of Poor Air Quality
- To share good practice
- To understand the likely impacts of Poor Air Quality on Cities such as Coventry and Towns Like Leamington Spa (To be aware that Air quality does not differentiate administrative boundaries)
- To consider possible ways to mitigate against Poor Air Quality
- To agree next steps towards cleaner Local Air and helping the Government with the Climate Change Emergency initiative

Friends of Earth

All local authorities should adopt an ambitious local climate action plan . And they should join with Friends of the Earth and others in urging more government action. Each local authority should declare a climate emergency as a sign of political intent.

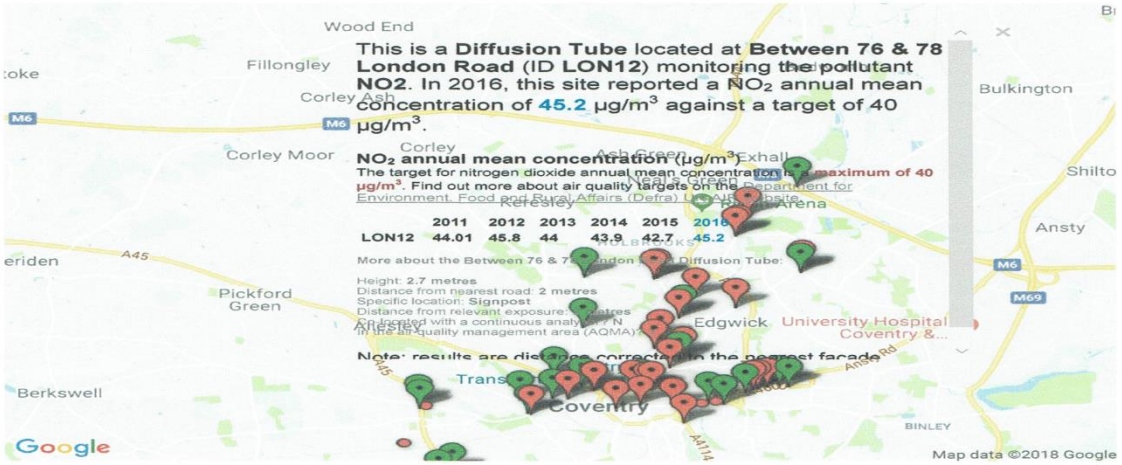
Performance Score and Key Issues

- Coventry 52%
- North Warwickshire 60%
- Lack of measurement in known pollution spots
- Focus on Nox
- Limited PMs Measurements
- No known measurement of less than PM2.5

An example of the work we are undertaking

Graph of Coventry Hot Spots 2015

Map of the location of the diffusion tubes around Coventry



AQ Mesh monitors

We are currently trialling two AQ Mesh monitors at one location in the city. These are small, battery operated units that measure nitrogen dioxide. We are investigating procuring more of these monitors in order to monitor at more locations in the future.

Pollution data

Further information on air quality monitoring in Coventry and the West Midlands, including pollutant levels and monitoring results.

« *Previous* Air quality in Coventry *Next* » Reviewing and assessing air quality in Coventry

Customer Services

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Graph of Coventry Hot Spots 2016

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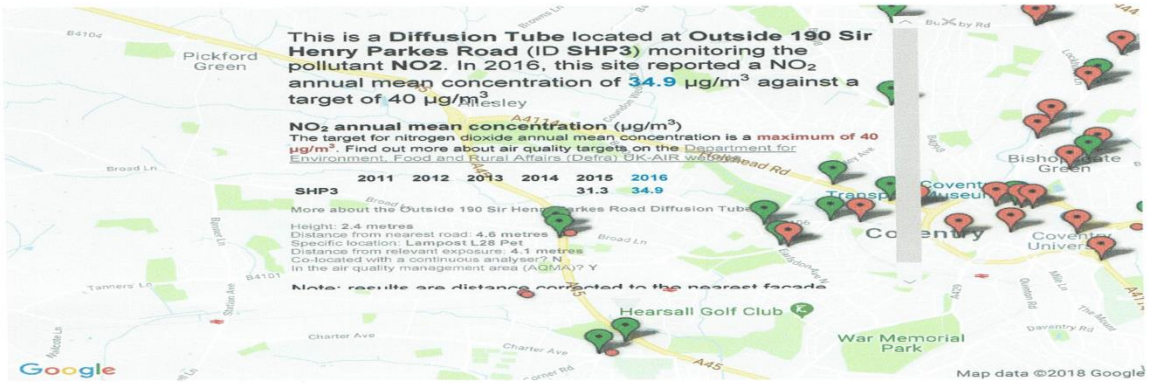

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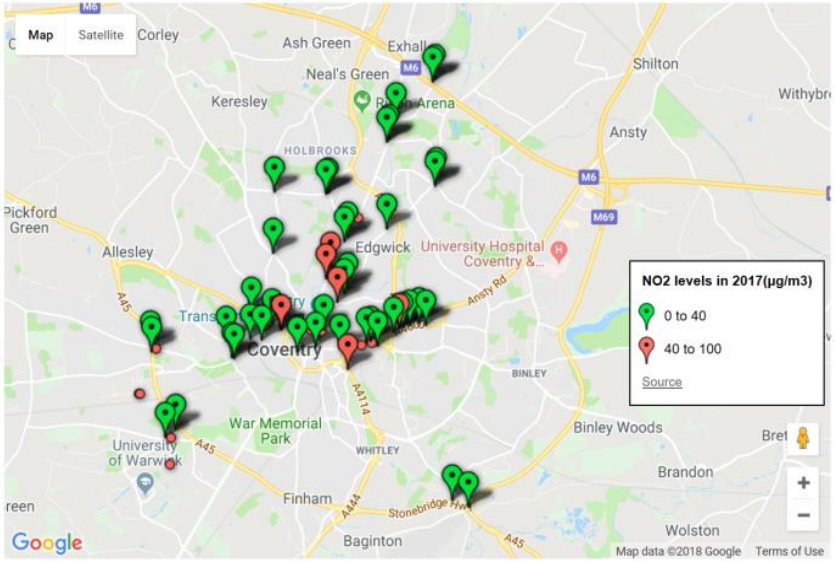
2017 Figures - Using Adjustment Factors

NB: The readings in 2017 were reduced by a bias and distance factors as recommended by the Government without any adjustment for instrument/Tube Known and Acknowledged 25% Error

Air quality in Coventry | Air · Monitoring air quality in

www.coventry.gov.uk/info/68/pollution/171/air_quality/2

Map of the location of the diffusion tubes around Coventry. The sites where Nitrogen Dioxide levels are less than 40µg/m3 are marked in green, and those that are over are marked in red.



AQ Mesh monitors

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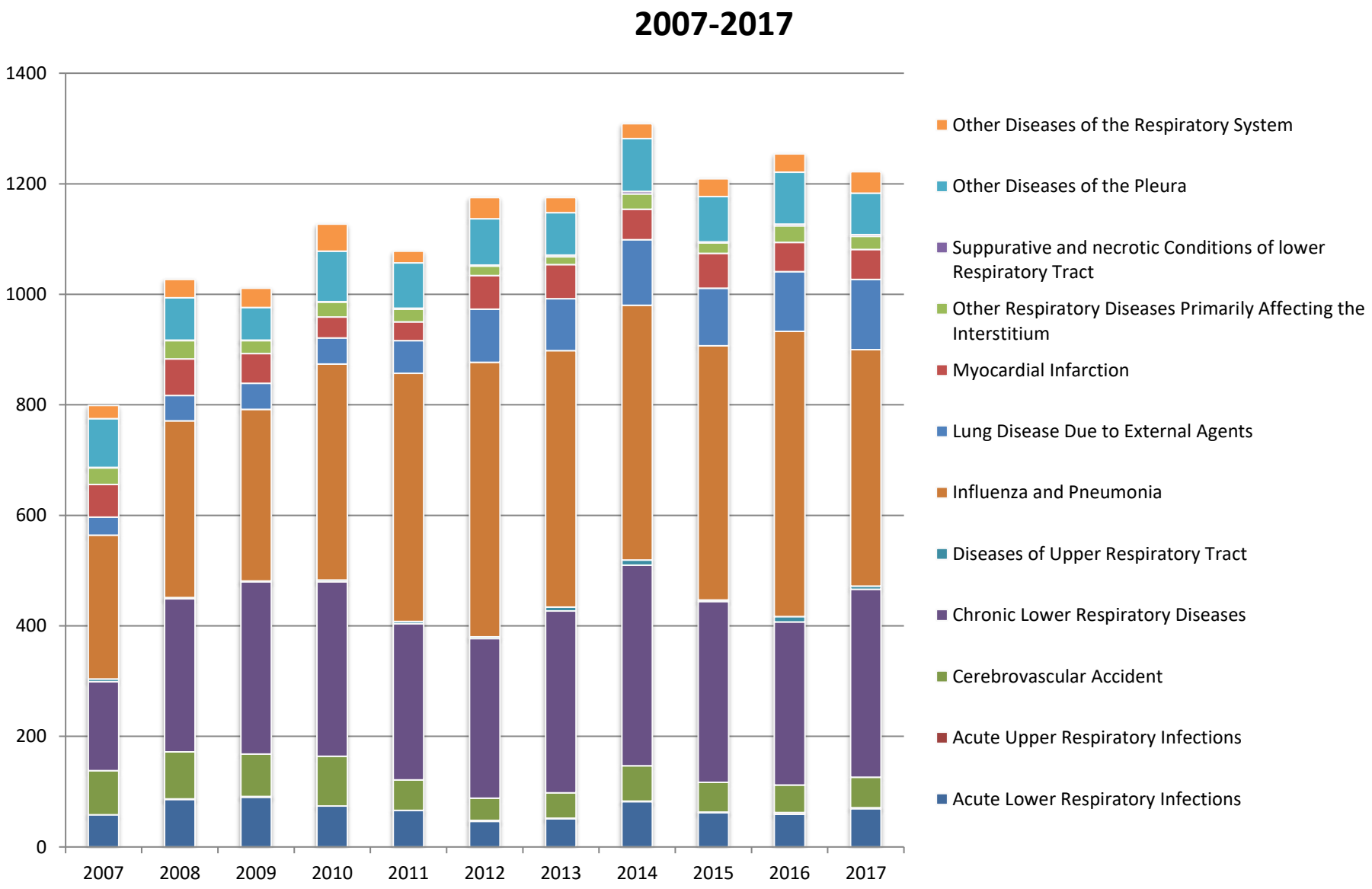
20/08/2018

Why 2017 Figures Improved?
A Travesty of Facts

Site Refere	Address	Specific Locatic	Siting Category	Easting	Northing	Tube to receptor	Distance from tube to road	Distance from road	Height	Bias Adjusted (0.87) and Annualised [1]	Distance corrected to nearest exposure	RZ Corrections
CC01*/1N	Holyhead R	Lamp Post	Roadside	432105	279578	4.1	3.1	7.2	2.8	36.8	33.9	56.40
HR1	Holyhead R	Downpipe	Façade	432683	279240	0	5.8	5.8	2.7	**52.8**	**52.77**	80.87
HR2c	104 Holyhe	Downpipe	Façade	432525	279345	0	6.1	6.1	2.1	26.9	26.93	41.27
HR1c	73 Holyhea	Lampost	Roadside	432712	279227	4.2	1.8	6	2.5	**79.2**	**63.9**	121.38
BH1a	Walsgrave	Lampost T1FE/	Roadside	434987	279209	2.9	2.93	5.83	2.67	37.6	35.0	57.62
BH2a	Walsgrave	Window	Façade	435125.972	279286.384	0	3.9	3.9	2.8	**43.5**	**43.52**	66.67
BH4	Walsgrave	Sign	Roadside	435331.002	279358.004	2.2	1.3	3.5	1.8	**45.3**	39.8	69.43
												0.00
BH13	196/198 W	Downpipe	Façade	435507.842	279387.046	0	5.2	5.2	2.5	34.1	34.07	52.26
BH14	238 Walsgr	Lamp post 238	Roadside	435657.77	279356.774	8	1.6	9.6	2.5	37.5	30.3	57.47
BH15i	Walsgrave	Lamp postRoadside		435184	279298	3.5	1	4.5	2.3	**40.9**	34.4	62.68
												0.00
FS1	Fairfax Stre	Lamp Post	Roadside	433569	279233.999	3.9	1	4.9	3	**45.9**	39.3	70.34
												0.00
QV1	Lampost ou	Lamp post L15	Roadside	433029	278798	2.12	1.95	4.07	2.57	38.7	35.1	59.31
GF1	Greyfriars T	Downpipe	Façade	433407	278882	0	0.47	0.47	2.59	25.5	25.53	39.08
GS1	Outside Go	Downpipe	Façade	433899	278845	0	9.8	9.8	2.8	35.3	35.30	54.10
LON12	Between 7(	Signpost	Roadside	434073	278459	2	2	4	2.72	**48.8**	**44.3**	74.79
												0.00
SE1	Spon End, S	Downpipe	Roadside	432083.701	279042.164	2.6	0.1	2.7	2	35.4	30.0	54.25
SE3	97 Spon En	Downpipe	Façade	432302.698	279027.648	0	2.3	2.3	3.1	36.6	36.62	56.09
QAV01	Queenslan	Lamp post	Roadside	431595	278990.999	5.2	0.1	5.3	2.5	**41.9**	28.8	64.21
QAV12	Queenslan	downpipe	Façade	431703.653	278680.098	0	4.3	4.3	2	31.1	31.12	47.66
QAV13	Hearsall La	downpipe	Façade	431762.894	278657.464	0	4.9	4.9	2.5	37.3	37.34	57.16
ngford Road												0.00
R5	Foleshill Rc	Downpipe	Façade	433716.001	280502.996	0	3.7	3.7	2.8	**40.1**	**40.13**	61.46
R6	Foleshill Rc	Signpost	Roadside	433609	280246	2.2	2.05	4.25	2.72	**50.7**	**45.7**	77.70
R8	Foleshill Rc	Downpipe	Façade	433992.004	281008.002	0	4.3	4.3	2.75	37.3	37.26	57.16
R9	Foleshill Rc	Lamp Post	Roadside	434059	281105	1.83	3.07	4.9	2.65	36.9	34.9	56.55
LR1	23 Longfor	Downpipe	Façade	434836.002	283030.003	0	5.6	5.6	2	37.8	37.80	57.93
LR2	24 Longfor	Downpipe	Façade	434879.997	283076.999	0	4.2	4.2	2	37.2	37.17	57.01
LR3	Longford R	Downpipe	Façade	435015.892	283515.014	0	8.5	8.5	1.5	38.7	38.71	59.31
												0.00
BRN2	Burnaby Rc	Downpipe	Façade	433604.997	281964.998	0	5.5	5.5	2.75	36.0	35.98	55.17
BRN5	41 Holbroo	Downpipe	Façade	433639.7	281995.91	0	6.7	6.7	2	32.6	32.57	49.96
BA1	Beake Aver	Downpipe	Façade	432526	280806	0	7.5	7.5	3	33.8	33.75	51.80
BA1c	299 Beake	Downpipe	Façade	432544.08	282004.7	0	10.45	10.45	2.04	25.2	25.15	38.62
												0.00
SS1	Stoney Star	Downpipe	Façade	434061.848	280082.127	0	3.7	3.7	2.5	34.3	34.25	52.57
SS2	Stoney Star	Downpipe	Façade	433993.999	279968.999	0	4.5	4.5	2.5	32.6	31.27	49.96
SS3	R/O 21 Torc	astle Close (fa	façade	434842.004	281271.996	0	4.5	4.5	2.5	36.1	36.09	55.33
SS5	Lampost L2	Lampost	Roadside	433852	279814	1.8	2	3.8	2.51	**45.8**	**42.7**	70.19
												0.00
												0.00
BELL1	16 Hall Gre	Downpipe	Façade	435849	282211	0	5.7	5.7	2.5	38.2	38.15	58.54
BELL2	314 Bell Gr	Downpipe	Façade	435826	282158	0	2.9	2.9	2.7	35.2	35.20	53.95
FGS2	Select & Sa	Downpipe	Façade	434450	279001	0	2.4	2.4	2.7	32.7	32.67	50.11
FGS3A		Downpipe	Façade	434521	279024	0	5.5	5.5	2.5	33.8	33.78	51.80
GR1	217 Gulson	Downpipe	Façade	434679	278920	0	4.5	4.5	2.5	33.5	33.45	51.34
Grange2		Telegraph Pole	Roadside	435765	284246	1.44	0.3	1.74	2.4	35.7	32.50	54.71
SHP1	257 Sir Her	Downpipe	Façade	430447.4	277080.3	0	9.93	9.93	2.37	/	<25%	
SHP2	262 Sir Her	Downpipe	Façade	430364.1	277059.6	0	12.47	12.47	2.3	28.6	28.58	43.83
SHP3	Outside 19	Lampost L28 P	Roadside	430566.84	277231.21	4.16	4.6	8.76	2.4	34.0	31.20	52.11
BL1	Corner Bro	Lampost	Roadside	430043.77	278890.3	9.6	1.5	11.1	2.55	31.6	26.40	48.43
DH1	Outside 58	Lampost L148F	Roadside	430076.25	278789.4	12.67	3.17	15.84	2.45	29.9	25.60	45.82
												0.00
STL1	End of Stor	Lampost L6KGF	Roadside	436203.494	275841.291	9	12	21	2.45	35.2	31.20	53.95
LON8	On no. 703	Downpipe	Façade	436551.238	275703.36	0	17.9	17.9	2.45	30.0	29.97	45.98
												0.00
Grange3	161/163 G	Telegraph Pole	Roadside	435791	284285	1.44	0.3	1.74	2.43	35.4	32.2	54.25

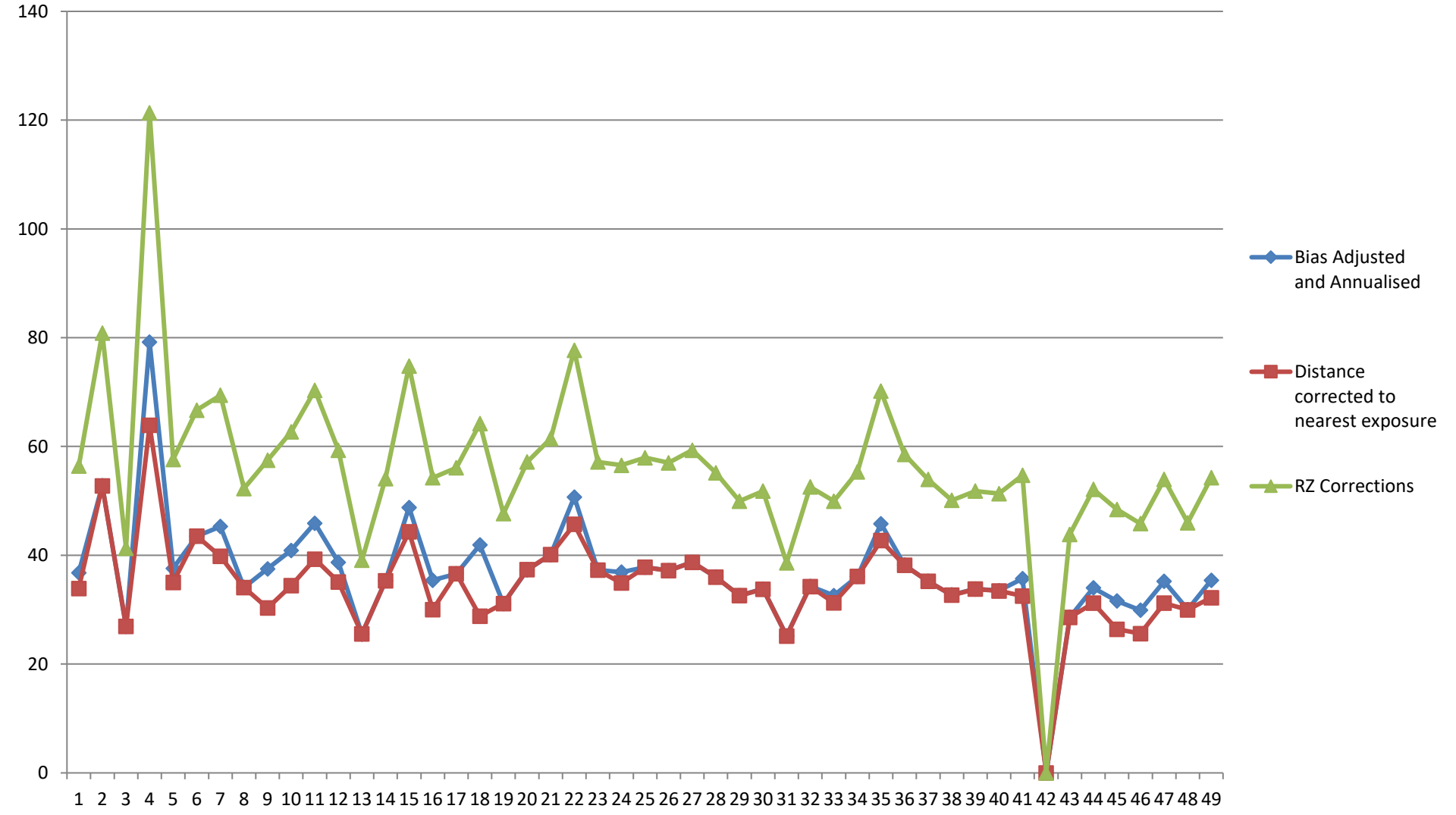
Hospital Admissions vs Diffusion Tube Readings



Actual Diffusion Tube Readings

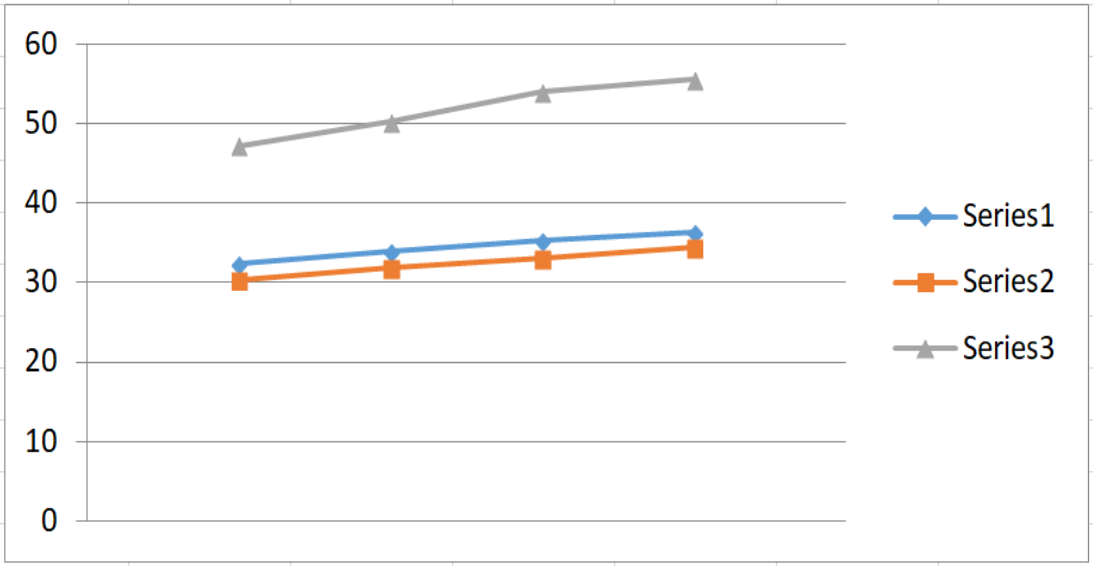
Bias Adjusted vs Distance Corrected vs RZ Corrected

NB: RZ figures are based on actual measurement sat road levels



Average Diffusion Tube Reading 2015-2018

2015	32.37	30.35	47.26
2016	33.96	31.94	50.28
2017	35.26	33.16	54.02
2018	36.43	34.55	55.67



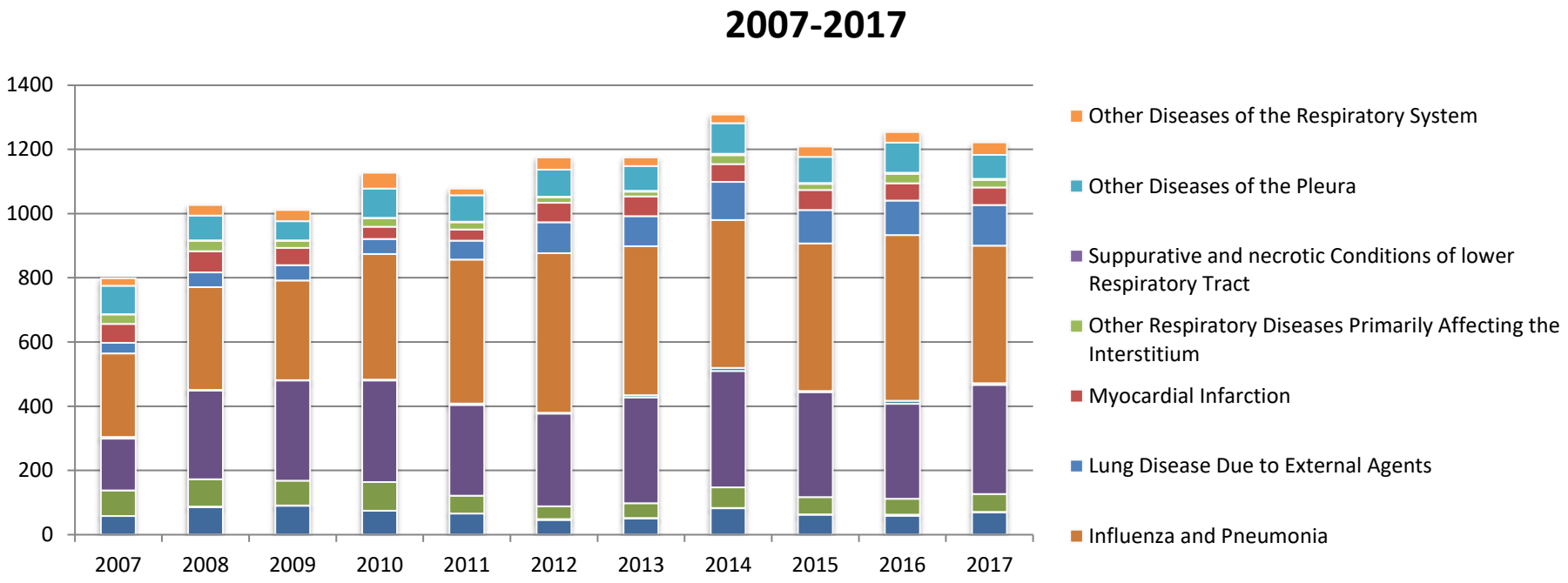
Key:

Series 1 - Average - Tube Readings Error Not Adjusted

Series 2 - Average - Error Not Adjusted and Readings Biased and Reduced as per Government Advice

Series 3 - Average Max Possible Actual Values Correlated with Actual Readings at Road Level

Hospital Admissions vs Diffusion Tube Readings



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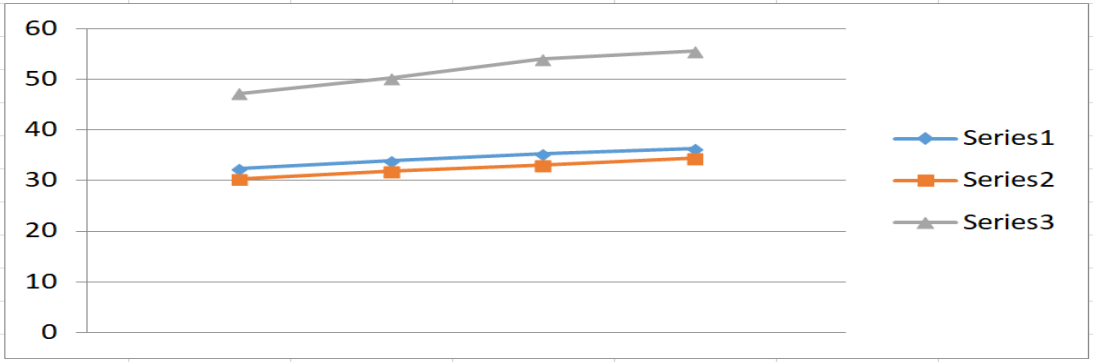

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Series 3 - Average Max Possible Actual Values Correlated with Actual Readings at Road Level

Summary of Results

- The results in above slides are examples of worsening air quality in cities such as Coventry
- It is clear that there has been a steady increase of some pollutants viz., 6% NOx similar a increase in PM10 and PM2.5 in Coventry every year since the measurement started.
- The results for 2017 shows a reduction but this is not true as the readings have been intentionally reduced and in fact they should have shown an increase. The method used to reduce figures arbitrarily and illogically is shown in table presented in slide 11.
- There is a correlation between level of pollutants and admission to local hospitals for respiratory problems as shown in slide 15.
- Based on the results a local office is recommended to be established to monitor level of pollution as part of a serious attempt in helping to tackle air pollution which should be enshrined as a main objective of future infrastructure plans in any forthcoming local or national Government review.

No systematic mapping of pollution hotspot areas and non-existence or inaccurate means of measuring harmful pollutants

Thank you for your attention