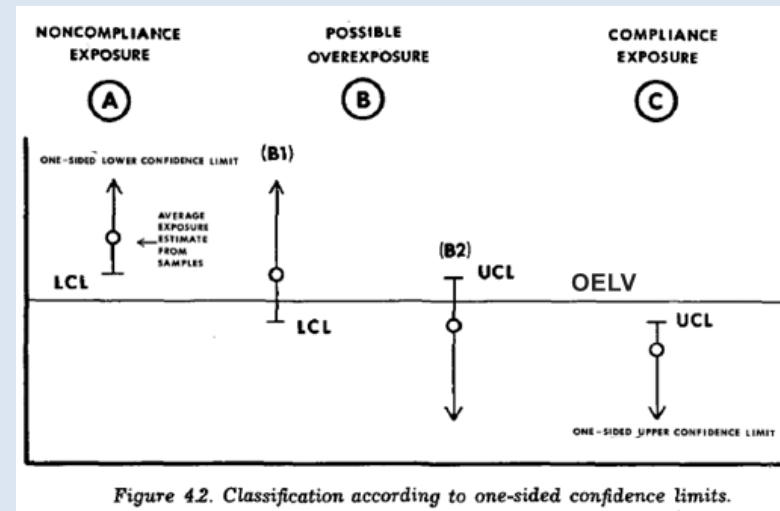


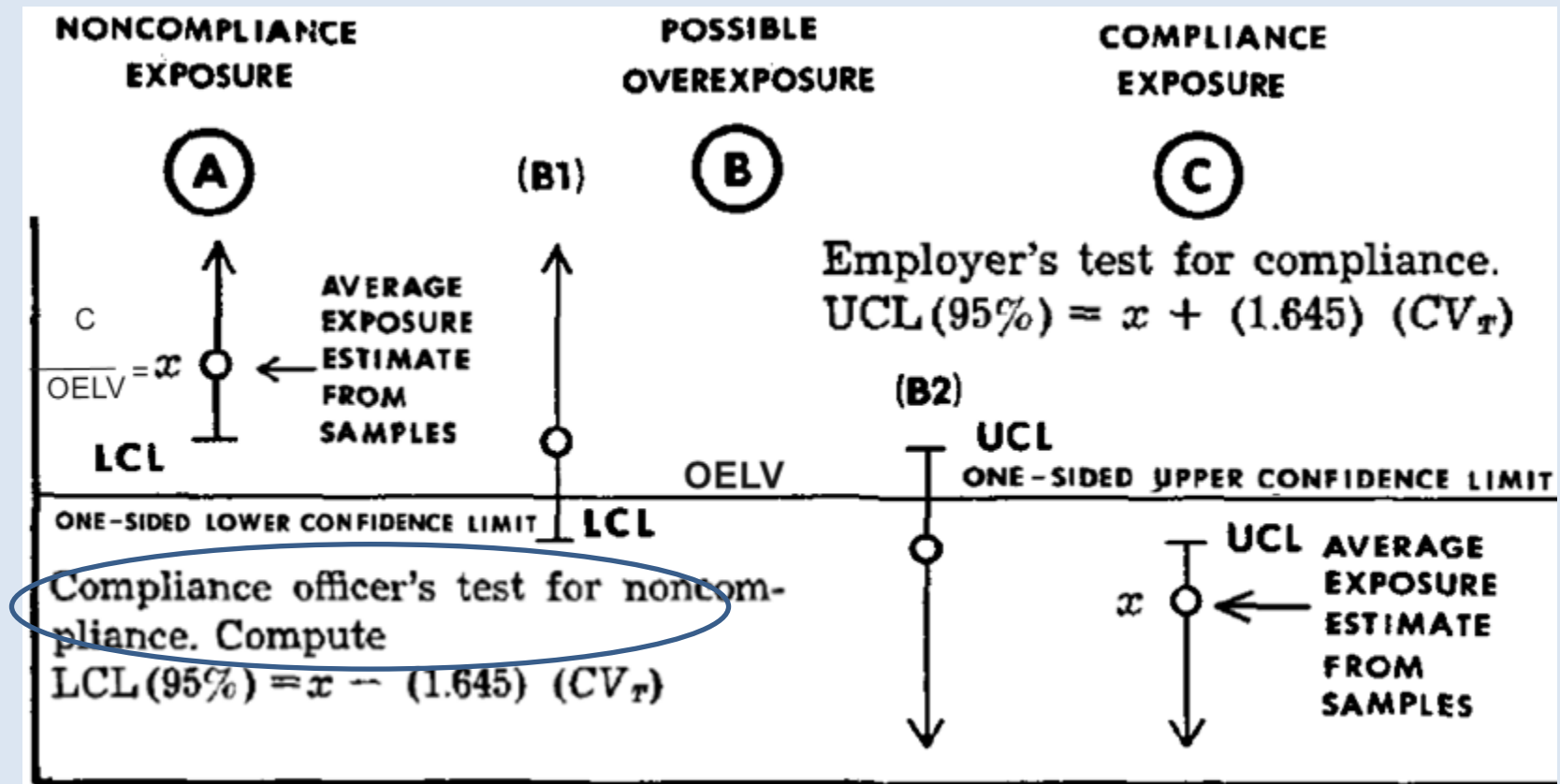
Legal complinace

EU: Official Journal L 131 , 05/05/1998 P. 0011 – 0023 Article 6.5

"..where an occupational exposure limit value has been exceeded, the employer shall immediately take steps...to remedy the situation by carrying out preventive and protective measures."



Single measurement US Law enforcement



Leidel DHEW (NIOSH) 77-173 Figure 4.2. Classification according to one-sided confidence limits.

Example Xylene 1330-20-7

Occupational load name:	xylene
CAS-number	1330-20-7
Sampling method	
Source:	MDHS 72. For the method see: http://www.hse.gov.uk/pubns/mdhs/index.htm#2748
Range:	0.067 to 400 mg/m3
Year:	1993
Coefficient of variation:	0.12
Maximum sampling time in minutes:	480
Suitable for PAS?	Y
Validation:	2
Direct reading?	N
Analysis	
Method:	GC-FID
Detection lower range:	50.0 ng

Sampling	
Principle:	Active
Medium:	Tube Chromosorb 106 200 mg + tube coconut cha
Stability:	-
Permitted flow:	5.0 to 200.0 mL/min
Maximum	2.5 Litre



Health and Safety Executive
Occupational Medicine and
Hygiene Laboratory

MDHS 72

Methods for the
Determination of
Hazardous Substances

March 1993, reprinted

Volatile organic compounds in air

Laboratory method using pumped solid sorbent
tubes, thermal desorption and gas
chromatography

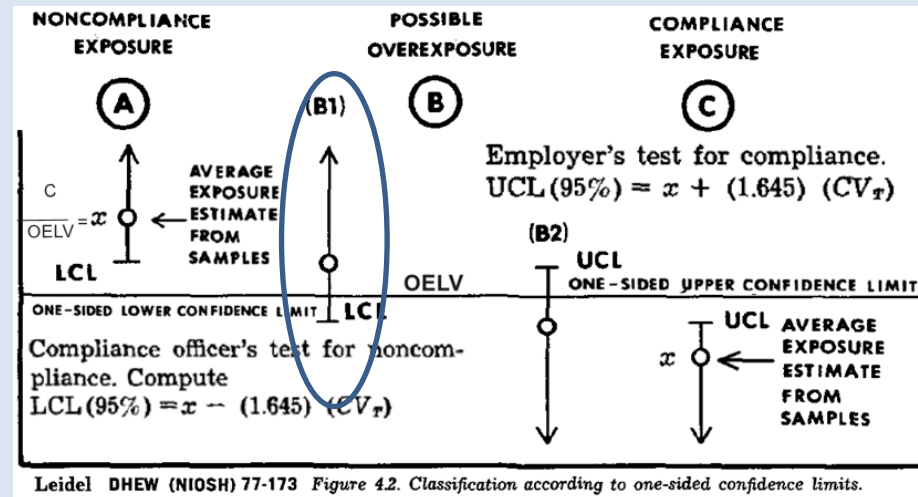
INTRODUCTION

Requirements of the COSHH Regulations

appropriate sorbent (or sorbents) being selected for the
compound or mixture to be sampled. Provided suitable
sorbents are chosen, volatile organic components are
retained by the sorbent tube and thus are removed from

Legal non-compliance?

- Concentration $TWA_{8 \text{ hours}} = 249.76 \text{ mg/m}^3$
- EU OELV $_{8 \text{ hours}} = 221 \text{ mg/m}^3$
- $X = C/OELV = 249.76/221 = 1.13$
- Coefficient of variation $CV_t = 0.12$
- $LCL = 1.13 - (1.64) * 0.12 = 0.93$
- Possible overexposure (B1)



Leidel DHEW (NIOSH) 77-173 Figure 4.2. Classification according to one-sided confidence limits.