Supplementary Table – Summary of concentration papers included in the analysis.

Source	Description	Measurement technique	Number of samples collected	Sampling duration
Frederiksen et al., (2012) [9]	PCB in indoor air from sealants in contaminated and uncontaminated apartments, Denmark	air sampled using pumps with a flow 1.9l/min and connected to a XAD 2 sorbent tube fitted. Air sampled about 1m above the floor for approx. 24 hours resulting in a mean sample of 2.7m3	83 air samples and 21 elastic sealants samples of apartments with PCB-containing sealants. PCB measured in 21 air samples from reference apartments located in an uncontaminated section of the same estate.	24 hours
Simonetti et al., (2020) [10]	Occurrence of pollutants in domestic indoor dust, Rome	no time/area was defined to collect a significant amount of dust within a household vacuum cleaner. Dust samples were homogenized and sieved (63um) before use.	2 houses	Not specified
Wang et al., (2015) [13]	Dust samples taken in homes from 12 countries for comparative assessment.	vacuum cleaner bags sieved to 150µm and analysed using high performance liquid chromatography-tandem mass spectrometry	284 indoor dust samples taken in homes from 12 countries. Only reporting samples from Greece (n=28) and Romania (n=23)	Not specified
Christia et al., (2019) [22]	Occurrence of legacy and alternative plasticizers in	vacuum cleaner one m2 of carpet for 2 minutes or four m2	18 Dust samples	Not specified

Supplementary Table – Summary of concentration papers included in the analysis.

	indoor dust from European homes, Belgium, Ireland, Netherlands.	of bare floor for 4 minutes. Dust sieved to 500um		
Newton et al., (2015)[26]	Flame retardants in indoor and outdoor media, Sweden	sampling during heating system in Sweden. Dust: settled dust collected from surfaces >1m above floor. Not taken from products suspected to be flame retardant, bust from as many samples as possible from different areas of room to obtain a representative sample (reduce bias caused by spatial variation). (Air & ventilation: 4 sampling trains each containing a GFF and two PUFs taken for 24h using low volume active air pump at a flow rate of 12/min (3L/min for each sampling train)).	4 apartments	Air: 24 hours
Cequier et al., (2014)[38]	Occurrence of legacy and emerging flame retardants in indoor environment (dust and air), Norway	Air: leland legacy pumps with a flow rate of 12L/min for 24h. Four stainless steel holders each containing one quartz filter and two cylinders of PUF. Total vol of air ~17m3. Dust: forensic filters coupled to a GM80 vacuum cleaner. Floor dust collected with a polyethylene grid (1-3mm pore	48 households	Air: 24 hours Dust: not specified

Supplementary Table – Summary of concentration papers included in the analysis.

		size) settled dust (n=12) without grid. settled dust from elevated surfaces in living rooms. floor dust from available floor in living rooms.		
Zhou et al., (2017) [41]	Occurrence of flame retardants in indoor dust, Germany	samples collected using a vacuum cleaner equipped with a nylon sampling bag (25um pre size). Dust from each room was collected for approximately 15 minutes over the entire floor surface area)	15 indoor dust samples	15 minutes
Tao et al., (2016) [42]	Flame retardants indoor air and dust, UK	Air samples collected from houses using double-bowled passive air samplers containing a polyurethane foam disk (PUF) and a glass fibre filter (GFF) for ~45 days at a height of 1-2m. extracted by PLE. Dust samples collected from houses using mini vacuum cleaner fitted with nylon sampling socks (25µm pore size). 1m2 carpet vacuumed for 2min or 4m2 bare floor for 4min. sieved through 500µm sieve & homogenised. Analysed by GC/MS in ECNI mode and by LC-MS/MS	Indoor air: 15 Dust: 45	Air: 45 days

Supplementary Table – Summary of concentration papers included in the analysis.

Demirtepe et al., (2019) [43]	Linking past use of legacy SVOCs with current indoor levels in 60 homes, Slovakia	PUF-PAS air samples deployed for 32-35 days at sampling rate 1.6m3/day capturing 50m3 of air. Dust collected using vacuum cleaner with polyester sock insert (1-3m2 area) and sieved with 500um sieve and 100mg used for extraction.	60 samples	Air: 32-35 days Dust: not specified
Kolarik et al., (2008) [48]	Concentration in settled dust, Belgium	sampling performed in the child's bedroom above the floor level by using a vacuum cleaner equipped with a phthalate free ALK dust collector and filter	177 samples	Not specified
Canbaz et al., (2016) [53]	Exposure to flame retardants indoor dust and childhood asthma, Sweden.	vacuum the mattress of the mother's bed with their own vacuum cleaner for 2.5 min in a standardized way. They were requested not to vacuum clean the bed for 14 days before collection. Contaminants removed and approximately 50 mg of each dust sample was weighed in an acetone-rinsed and air-dried glass tube and internal standards and analysed with GC-EI-MS,	220 samples of dust collected from mother's mattress	2 weeks
Chevrier et al., (2016) [54]	Childhood exposure to flame retardants and neurodevelopment, France.	Dust sieved to 500um	246 dust samples from vacuum cleaner bags in the homes	Not specified

Supplementary Table – Summary of concentration papers included in the analysis.

Bergh et al., (2011) [62]	Exposure to phthalates and OPFRs	AC powered pump drawn through commercially available solid phase extraction (SPE) cartridge. Sampling equipment placed om central location (living room) and all adjacent doors remained open. Duplicate air samples collected for 24 hours to a total volume of 1.0 - 1.5m3 and analysed using GC-MS/MS	Using the Stockholm Indoor Environmental Questionnaire (SIEQ) classified building as high or low risk for SBS. 22 Low risk building and 23 high risk buildings totalling 45 buildings each containing 4 apartments (169 apartments). Sampling undertaken during winter 2006/2007	24 hours
Meyer et al., (2013)[73]	Stratified cross sectional study on housing estate for PCBs, Denmark	Air samples Details on the sampling procedure and laboratory analyses can be found in Frederiksen et al, 2012	104 (83 contaminated and 21 non-contaminated flats)	1 month
Vorkamp et al., (2011) [74]	Flame retardants in indoor environment and association with prenatal exposure, Copenhagen	samples of air and particles collected in their home (living room), over a period of five days immediately prior to the delivery and provide the contents of the vacuum cleaner for analysis. Air collected using Quartz filters and polyurethane foam (PUF) were used to collect the samples.	Dust: 42/47 Samples Air: 36 samples	Dust: not specified Air: 5 days

Supplementary Table – Summary of concentration papers included in the analysis.

		Dust sample came from private vacuum cleaners and collected in Rilsan bags directly prior to delivery and three months later. Sieved to <75um.		
Sahlström et al., (2015) [78]	Estimated intakes of flame retardants and compared to mother-toddler cohort, Sweden	Dust samples were collected on surfaces at least 1m above the floor on the living room, kitchen, bedroom, and hallway. Dust sample collected using cellulose filters in styrene acrylonitrile holder installed in the nozzle of a vacuum cleaner.	27 house dust samples were collected in a follow up study	Not specified
Ali et al., (2011) [103]	Flame retardants in indoor dust, Belgium, and UK	1m2 of carpet vacuumed for 2 min or 4m2 bare floor for 4 min using nylon sampling socks. Sample sieved through 500µm mesh & homogenised. Analysed using GC-MS	39 houses	Not specified
Al-Omran and Harrad. (2018) [104]	Within room and within home spatial and temporal variability, United Kingdom	sampled method outlined in another paper, analysed using gas chromatography/mass spectrometry	238 dust samples	Monthly over 9 months
de la Torre et al., (2020) [105]	Flame retardants in dust withing 65 European houses, Belgium, Italy, Spain	vacuum entire house and sieved to 500µm	22 dust samples (Belgium) 21 dust samples (Italy) 21 dust samples (Spain)	Not specified

Supplementary Table – Summary of concentration papers included in the analysis.

Fromme et al., (2014) [106]	Flame retardants in house dust, Germany	Dust collected from vacuum cleaner bag. analysed with LC-MS/MS and simultaneously with GC/MS. Samples collected in accordance with German guidelines sieved in <63um	20 residences	Not specified
Kademoglou et al., (2017) [107]	Legacy and alternative flame retardants in Norway and UK indoor environments	Samples collected from existing vacuum cleaner bags and all dust samples sieved to <250um	10 indoor dust samples	Not specified
Melymuk et al., (2016) [108]	Seasonality and indoor/outdoor relationship for flame retardants and PCBs in residential air, Czech Republic	Polyurethane foam passive air samples (PUF-PAS) deployed inside and outside the homes simultaneously. In three homes samplers were deployed both in living rooms and bedrooms. Two sampling campaigns - one in summer, one in winter. Samplers analysed by GC-MS	20 households in winter 17 households in summer	28 days
Melymuk et al., (2016) [109]	Legacy and emerging compounds in five indoor matrices in residential environment	All floors and surfaces in the room were initially cleaned so that samples would reflect only the sampling period. Air samples were collected during a 28-day sampling period using low-volume active air sampler (LVAAS), polyurethane foam passive air samplers (PUFPAS) and cascade impactor. On day 28, dust and wipe samples were	12 samples	28 days

Supplementary Table – Summary of concentration papers included in the analysis.

		collected, Wipe samples were collected using a pre-cleaned kimwipe moistened with reagent-grade 2-propanol. Floor and bed dust were collected using a pre-cleaned polyester sampling sock inserted into the tube of a conventional household vacuum cleaner. Briefly, PUFs, GFFs, and kimwipes were Soxhlet extracted in dichloromethane in an automated extractor, while dust samples were sieved (500 mm) and extracted by sonication in acetone: n-hexane. Samples were analysed by gas chromatograph-mass spectrometry		
Abb et al., (2009) [110]	Phthalates in house dust, Germany	dust taken from vacuum cleaners and sieved (<63um) prior to analysis	30 households	Not specified
Audy et al., (2018) [111]	Pesticides in indoor environments (air and dust), Czech Republic	Air - 28-day deployments of polyurethane foam passive air samplers (double bowl with 0,63m3/day sampling rate (Czech samples), spiked with known amounts of recovery standards, analysed with GC-MS. Dust - household vacuum cleaner fitted with a polyester	20 homes 30 samples	28 days

Supplementary Table – Summary of concentration papers included in the analysis.

		sock. Largest possible area in each room sampled, sieved to <500µm, analysed by GC-MS.		
Becker et al., (2004) [112]	Phthalates in urine of children and house dust, Germany	Dust samples collected from vacuum cleaner bags as available in the households. Sieved to 63µm size fraction. Stored in glass bottles and analysed in a randomised sequence. Analysed using GC/MS and LC/MS	252 samples	Not specified
Berger-Preiss et al., (2002) [113]	Indoor exposure to pesticide in homes with woollen textile floor coverings, Germany	Suspended particles - Pallflex filters sampling approx. 10m3 at 2.6-3m3/h. Sampling at a height of 1m with sampler in middle of room. Dust - Vacuum cleaner with a dust bag. Study participants collected house dust only from wool carpets. Analysed by GC-MS	80 samples	2-3 weeks
Bergh et al., (2011)[114]	Flame retardants and phthalates in air and settled dust, Sweden	Air- AC-powered pump to draw air through commercially available SPE (solid-phase extraction) cartridges with aminopropyl silica as the adsorbent. For approx. 8 hours during the day whilst inhabitants were out in a central location in the house with all adjacent doors open. Analysed by GC-MS. Dust-	10 samples of air and dust	Air: 8 hours Dust: not specified

Supplementary Table – Summary of concentration papers included in the analysis.

		cellulose filters fitted to industrial strength vacuum cleaner used to collect dust from tops of bookshelves, cupboards, desks, casings of windows and doors at least 0.8m above floor. Analysed by GC-MS		
Björklund et al., (2012) [115]	Comparison of flame retardants in dust, Sweden	researcher collected: pre-weighed cellulose filters in nozzle of portable vacuum cleaner. From surfaces at least 1m above floor (e.g., bookshelves, windowsills, doors) in living room (if amount insufficient then hall also sampled (8) and other rooms e.g., bedroom, kitchen (3 homes)) Participant collected: new bag in home vacuum cleaner used in living room several times over 2 weeks. sieved through 500µm mesh.	19 homes	24 hours
Björklund et al., (2012) [116]	Indoor air as a source of flame retardants, Sweden.	Low volume active air samplers connected to personal pump. Flow rate: 1-15Lmin. Two PUF plugs & a glass fibre filter in each sampler train (for vapour phase and particle phase). Suspended at least 1m above floor. In living room	33 buildings	24 hours

Supplementary Table – Summary of concentration papers included in the analysis.

Björnsdotter et al., (2018) [117]	Presence of flame retardants in indoor dust, Spain and Netherlands	Vacuum cleaner with 40µm filter fitted & not sieved further. Analysed by LC-MS.	9 living room 9 bedrooms	Not specified
Blanchard et al., (2014) [118]	Air and settled dust in 30 dwellings, France	dust: collected in vacuum cleaner and sieved to <100µm. Air: collected on quartz fibre filter (QFF) and polyurethane foam (PUF). URG sampler	Dust: 30 samples Air: 30 samples	1 week
Bornehag et al., (2005) [119]	Phthalates in indoor dust, Sweden	vacuum cleaner with 90mm-membrane filters on polypropylene samplers. gas chromatograph/mass selective detector -phthalate identification; Gas chromatograph/flame ionisation detector - quantification	346 samples	Not specified
Bramwell et al., (2017) [120]	Determining dust and diet sources of flame retardants in cohort, UK	Dust collected using nylon sample sock with 25µm mesh size inserted into the nozzle of dirt devil 1100 vacuum cleaner. 1m^2 area including carpet and sitting or sleeping area vacuumed for 2 minutes, an in the case of wooden or vinyl floors 4m^2 for 4 mins. Sieved using 500µm mesh and analysed using GC-MS (PentaBDE (tri to hepta)) and BDE209 analysed by LC-NI-APPI-MS/MS	11 living room samples 12-bedroom samples	1 week

Supplementary Table – Summary of concentration papers included in the analysis.

Cristale et al., (2016)[121]	Occurrence of flame retardants in indoor dust, Spain	Vacuum cleaner. Dust sieved (500µm) analysed by GC-EI-MS-MS	5 homes	Not specified
Dallongeville et al., (2016) [122]	SVOC of respiratory health relevance, France	particulate and gaseous phase were actively sampled on quartz fibre filters and polyurethane foams at a constant flow of 2l/m dust samples were collected by the participants with their own standard vacuum cleaner. After sieving the contents of the vacuum cleaner bag approx. 80mg of the 63um-fraction were analysed.in for 5 days in the living room of each dwelling.	123 to 150 samples	5 days
D'Hollander et al., (2010) [123]	Occurrence in indoor dust from homes, Belgium	20 or 24m2 was vacuumed: living room, bedroom, kitchen and working area. Only bare floor was vacuumed, possibly covered with carpet. samples collected using nylon socks bought in a supermarket. sieved through 500um mesh	45 samples	
Dirtu and Covaci, (2010) [124]	Estimation of daily intake of organohalogenated contaminations, indoor dust, Romania	1m2 carpet vacuumed for 2mins using nylon sampling socks (pore size 25µm) inserted into furniture attachment tube of vacuum cleaner. Then analysed by GC/MS	18 households	

Supplementary Table – Summary of concentration papers included in the analysis.

Fromme et al., (2009) [125]	Human exposure to flame retardants, Germany	air was sampled using glass fibre filters and polyurethane foams and the dust was collected from used vacuum cleaner bags. One vacuum cleaner bag was collected from each household on the day of indoor sampling. sieved <2mm and analysed using GC.MS	34 samples	Air: 24 hours Dust: 7 days
Fromme et al., (2015) [126]	Indoor air in living room, Germany	Air samples collected using glass cartridges filled with a sandwich of polyurethane foam and XAD-2 with a constant airflow of 2.3m3/hour over 24 hours	13 residences	24 hours
Fromme et al., (2004) [127]	Occurrence of phthalate and musk, indoor air and dust, Germany	Air - adsorption on polyurethane foam (PU). Sample volumes of 2000L taken using gas sampler (GS-312) with a flow of 5L/min. Dust- samples taken from bags of vacuum cleaners in regular use. The fine dust fraction taken from between inner and outer paper layers. analysed by GC/ion trap MS.	Air: 59 apartments Dust: 30 apartments	Not specified
Fromme et al., (2017) [128]	Dust samples in residences, Germany	Samples collected from regularly used vacuum cleaner bags and sieved to <63µm. Then analysed by GC/MS.	25 residences	Not specified

Supplementary Table – Summary of concentration papers included in the analysis.

Geens et al., (2009) [129]	Assessment of human exposure through indoor air, Belgium	Samples from vacuum cleaner Inside tube of the vacuum cleaner a nylon sock was mounted to collect the dust. House dust collected from the main living room, bedroom and kitchen and each room vacuumed for one minute. Dust passed through a 500um mesh sieve and 10mg dust weighed and liquid solid extraction undertaken	18 dust samples	3 minutes
Glorennec et al., (2017) [130]	Determine children's exposure to insecticide via indoor dust, France	household vacuum cleaner and sieved to <100um	243 samples	Not specified
Goosey and Harrad, (2011) [131]	PFC's in dust from various countries and microenvironments	carpeted surface 1m2 of floor was sampled for 2 mins while 4m2 of bare floors sampled for 4 mins. Internal location not specified, and sample sieved through a 500um mesh size	9 dust samples, France 10 dust samples, Germany 45 dust samples, UK	Not specified
Harrad et al., (2006) [132]	Concentration of PCBs and flame retardants in indoor air and dust, UK	air: taken under normal room conditions in both living rooms & bedrooms. Passive air sampler (PUF disks) at a height of approx. 1m. PUF disks had a SA of 360cm2, in a customised stainless-steel cradle to permit air flow to all sides. Dust: inhabitants asked to provide contents of their vacuum	31 samples	28 days

Supplementary Table – Summary of concentration papers included in the analysis.

		cleaner bags. samples sieved through 500µm mesh.		
Harrad et al., (2008) [133]	Concentration of flame retardants in dust, UK	Vacuum cleaner fitted with nylon sample socks (25µm pore size), one m2 of carpet for 2min or bare floors 4m2 for 4mins. Sieved & homogenised. Analysed by. GC-MS	30 homes	Not specified
Huber et al., (2011) [134]	House dust and indoor air, Norway	house dust taken with industrial vacuum cleaner and collected from bookshelves, commodes, TVs, electrical heaters, picture frames, windowsills and sunblind. Airborne PFCs trapped on polyurethane foam - XAD2 tubes. Horizontally positioned at 115cm height	7 dust samples from living rooms.	Not specified
Jílková et al., (2018) [135]	Variability of flame retardants in indoor dust, Czech Republic?	vacuum samples taken from floors including entrance area, living, dining room, kitchen & sofa. Flat not cleaned in week prior. Household vacuum with polyester sock insert, sieved with 500µm sieve. GC-high res MS.	8 samples	Not specified
Kalachova et al., (2012) [136]	Occurrence of flame retardants in household and car dust, Czech Republic	Dust collected from floor and upholstered furniture in living room by 20 minutes of vacuuming.	25 households	Not specified

Supplementary Table – Summary of concentration papers included in the analysis.

		Each sample was mixed and sieved for 10 minutes using shaker with steel sieve (150um mesh)		
Korcz et al., (2017)[137]	Levels of flame retardants in house dust, Poland	Each home collected household dust in a disposable bag with their vacuum cleaners. Large fragments removed (hair, wood, plastic, metal), sieved through 150µm vibratory sieve. Analysed by GC/MS	129 samples	Not specified
Król et al., (2014)[138]	Occurrence of flame retardants in house dust and hair samples, Poland	Dust samples collected from selected households using either vacuum cleaner bags or tweezers. Sample sieved and weighted at 1g	12 households	Not specified
Langer et al., (2010) [139]	Concentration in dust collected from homes, Denmark	Dust collected from non-floor surfaces in the Children's bedrooms using a phthalate-free ALK dust filter mounted in a holder connected to a vacuum cleaner.	377 to 497 samples	Not specified
Langer et al., (2016)[140]	Flame retardants in dust within homes, Denmark	Dust collected from non-floor surfaces in children's bedrooms using ALK dust filters mounted in a holder connected to a vacuum cleaner. Analysed by GC/MS	497 samples	Not specified
Lankova et al., (2015)[141]	Analysis of compounds in house dust, Czech Republic	Dust samples collected from six households (i) bed/sofa, ii) floor in living room/bedroom, iii)	18 dust samples (6 households x 3 locations)	Not specified

Supplementary Table – Summary of concentration papers included in the analysis.

		door frames, high cupboards) with a vacuum cleaner with a new filter (100% cotton). Analysed with GC-MS/MS & UHPLC-MS/MS		
Luongo et al., (2016) [142]	Dust and air from apartment building, Stockholm	Dust collected at a height of at least 0.8m above the floor, from top of shelves, closets, desks and window/door frames. For dust sampling, a cellulose filter mounted in a styrene acrylonitrile holder inserted in a polypropylene nozzle and attached to industrial strength vacuum cleaner. Air samples drawn through a solid phase extraction cartridge and volume between 1.0 and 1.5m3 and collected during 24 hour on same date as dust collected	62 apartments	Air: 24 hours Dust: Not specified
Mandin et al., (2016) [143]	SVOC in dwellings, Nationwide survey, France	2100 Mini-Partisol air sampler coupled to a ChemPass model 3400 sampling system integrating both PM2.5 & PM10 PEMS impactors operating at 1.8±0.2L/min. total vol sampled=12.6±0.6m3. Particles collected on PTFE membranes.	285 dwellings / 24672136	7 days

Supplementary Table – Summary of concentration papers included in the analysis.

		SVOCs simultaneously analysed using thermal extraction (TE) and GC/MS/MS.		
Muenhor and Harrad, (2012) [144]	Within room and within building temporal and spatial variation of flame retardants in indoor dust, UK	1m2 vacuumed using Nilfisk sprint plus 1600W fitted with nylon sampling sock (28µm mesh size) places in furniture attachment. Sampled dust sieved through 500µm mesh and homogenised prior to analysis by GC/MS in EI mode.	8 samples	8 months
Nagorka et al., (2011) [145]	Phthalates in indoor dust samples, Germany	dust samples were collected by the participants with their own standard vacuum cleaner. After sieving the contents of the vacuum cleaner bag approx. 80mg of the 63um-fraction were analysed.	36 to 593 samples	Not specified
Rantakokko et al., (2019) [146]	Flame retardants in house dust, Finland	Dust was vacuumed from the whole floor surface area of the room (including carpets) to a nylon sock installed in suction nozzle of vacuum cleaner. Sieved through a standard tea filter (approx. pore size of 1mm). 50mg of dust was accurately weighed.	40 children bedroom	Not specified
Romagnoli et al., (2016) [147]	Indoor air quality, Italy	Airbourne particulate collected on polytetrafluoroethylene (PTFE) membranes each day over 24h starting at 8 am using	2 dwellings	3 weeks

Supplementary Table – Summary of concentration papers included in the analysis.

		low volume instruments (6-10L/min) with PM2.5 selective inlets. Analysed by GC/MS		
Roosens et al., (2010) [148]	Exposure to flame retardants, Belgium	Living area, kitchen, bedroom, study sampled. 1m2 for 1 min if carpet or 4m2 for 4mins if bare floor. Dust retained in nylon sampling sock inserted in furniture attachment. Passed through 500µm sieve before analysis by GC-ECNI/MS & LC-MS/MS	43 houses	Not Specified
Sakhi et al., (2019) [149]	Concentration in indoor air from homes, Norway	air samples (gas phase and particulate matter) were collected for 24 hours in the living room of the participants. Each samples holder contained one fitted and two polyurethane foam (PUF) cylinders. Air samples were simultaneously collected onto a porous polymer (phthalates) at flow rate of 0.07l/min for 24hr.	44 households	Air: 24 hours
Sanyal et al., (2017) [150]	Estimating indoor pesticide air concentrations, France	Quartz fibre filters (particulate phase) and PUF filters (gaseous phase) in living rooms at a constant flow rate of 2L/min. Extracted by PLE and analysed by GC/MS.	150 dwellings	5 days

Supplementary Table – Summary of concentration papers included in the analysis.

Schnelle-Kreis et al., (2000) [151]	Correlation of PCP concentrations in air and settled dust from floors, Germany	Occupants asked to stop active ventilation of rooms at least 12h before sampling and not to clean floor for 2 days before sampling. rooms used as usual, except with windows closed. AIR: samplers in or near centre of rooms, height of 0.5-0.9m. Two impingers in series with 75ml of 0.1M K2CO3 solution in each. air flow=2L/min over 5h (600L sampled). Duplicates in each room. DUST: taken instantly after air sampling. 1-2m2 of floor vacuumed with standard vacuum cleaner fitted with 70mm round paper filter in a special holder at opening of vacuum cleaner tube to avoid contamination. Only fresh dust sampled. Dust sampling from PCP treated materials avoided.	282 dust samples 287 air samples	Not specified
Seifert et al., (2000) [152]	Environmental Survey, Germany.	Deposited house dust was collected in beakers that were exposed over 1 year. If a child spent most of the time inside the children's room and additional beaker was placed there. The contents of the vacuum cleaner bags as	PCP's: 850 vacuum cleaner bags Pyrethroid and PBO: 1200 vacuum cleaner bags	Not specified

Supplementary Table – Summary of concentration papers included in the analysis.

		obtained from the dwellers were also analysed by GC/MS.		
Sha et al., (2018) [153]	SVOCs in indoor air in home environment, Sweden	Passive air samples deployed for 14 days at a height of 1.5m above the floor. SIP disks (PUF disks coated with XAD resin)	9 homes	4 weeks
Sjödin et al., (2008)[154]	Concentration of flame retardants in household dust, Germany and UK	Dust samples collected from disposable vacuum cleaner bags from private households sieved through a ~2mm sieve. Extracted by pressurised liquid extraction (PLE) analysed by GC/IDHRMS (gas chromatography/ isotope dilution high-resolution mass spectrometry).	Germany: 10 samples UK: 10 samples	Not specified
Sugeng et al., (2018) [155]	Flame retardants in dust, Netherlands	House dust was collected by vacuum cleaning the floor of the living room using a Dustream dust collector and filter, mesh size 40um.	50 households	Not specified
Sugeng et al., (2017) [156]	Flame retardants in body wipes and house dust, Netherlands	dust collected using vacuum cleaner present in the home with a dustream dust collector and filter.	14 samples	Not specified
Tay et al., (2017) [157]	Settled dust and stationary air samples were collected from the living room of 61 households in Norway between November 2013	Stationary air was sampled in the living room for 24 h using a low-volume active air pump (Leland Legacy, SKC Inc., Eighty-Four, PA) attached to four parallel sampling trains each	60 indoor dust and 60 stationary air samples.	Air – 24 hours. Dust – 1 collection

Supplementary Table – Summary of concentration papers included in the analysis.

	and April 2014.In parallel, personal air samples from adults residing in these homes were collected. Thirteen of the personal air samples were available for this study (the other personal air samples went to analysis of other analytes elsewhere)	containing two polyurethane foam (PUF) plugs and one glass fibre filter (GFF) at a flow rate of 12 L/min, giving a total sample volume of ∼17 m3. After the air sampling was complete, settled dust was collected from elevated surfaces (e.g., tables, shelves) in the same living room area using a vacuum cleaner with a dust sampling filter connected to it (cellulose filters in styrene−acrylonitrile holders, KTN AB, Bålsta, Sweden). Air and dust field blanks were also collected.		
Thuresson et al., (2012) [158]	Flame retardants in indoor air and dust from Stockholm microenvironments, Sweden.	air sampling using a low volume active air sampler with flow rate 1-15L/min. Air collected on PUF and glass fibre filter (GFF). Sampler suspended 1m above floor during heating season. Dust samples collected on cellulose filter in vacuum cleaner at 1m above the floor. Samples divided into aliquots	Air: 10 houses/44 apartments Dust: 10 houses/34 apartments	24 hours
Van den Eede et al., (2011) [159]	Assessment of human exposure to flame	Dust samples taken from individual house or apartment in Belgium by vacuuming 1m2	33	Not specified

Supplementary Table – Summary of concentration papers included in the analysis.

	retardants in indoor dust, Belgium	of carpeted floor or 4m2 of bare floor surface for 2 or 4 minutes respectively of the kitchen, study, bedroom and living room area. all samples collected with same vacuum cleaner using nylon sampling socks which were mounted on the furniture attachment tube. Dust samples sieved with a 500um mesh		
Velázquez-Gómez et al., (2019)[160]	Occurrence, profile, and uptake of dust in houses, Spain	Samples collected by scientific staff with a vacuum cleaner. dust was sieved using 500 and 125um stainless steel sieves	11 samples	Dust: not specified
Venier et al., (2016) [161]	Flame retardants in indoor environment, Czech Republic	floor dust samples from each room were taken using pre-cleaned polyester socks inserted on a vacuum cleaner hose attached by vacuuming the largest possible area.	29 air samples 29 dust samples	Not specified
Vykoukalová et al., (2017) [162]	Flame retardant in indoor environment, Czech Republic	Dust sampling in bedroom sampling involved polyurethane foam passive air samplers and dust collected on settled floor dust into nylon socks by vacuuming	20 samples	28 days
Weiss et al., (2018)[163]	Comparison of two exposure pathways,	Samples were vacuumed from the living room, adult's	17 families	Not specified

Supplementary Table – Summary of concentration papers included in the analysis.

	different dust particles were generated: a respirable fraction (<5um) and an ingested particle fraction in the anticipated size range of skin adherence (<75um) Sweden	bedroom and the child's bedroom using a dust collector fitted with disposable mesh (40um) attached to a household vacuum cleaner tube. Samples sieved (1mm) to isolate estimated ingestion fraction (0.04 - 1.0mm) for cats licking their fur.		
Wemken et al., (2019) [164]	Concentration of flame retardants in indoor air and dust, Ireland	Dust: vacuum cleaner with nylon sock (25µm) nylon sock attached to furniture head. Collected from 1m2 of carpet or 4m2 tiles/wood. Sieved through 500µm mesh. Air: passive air samplers deployed on a sorbent impregnated PUF disk partially enclosed in two stainless steel housings. Samplers placed on elevated surfaces. samples extracted via PLE. BOTH: Analysed by GC-EI/MS and LC-MS/MS	32 homes	Dust: 4 minutes Air: 60 days
Winkens et al., (2017) [165]	Indoor air sampled in children's bedrooms,	indoor passive air samples undertaken in children bedroom with one exception where child slept in living room. Located on shelves, cupboards, or other suitable horizontal surfaces where they would not be disturbed	57 samples	21 days

Supplementary Table – Summary of concentration papers included in the analysis.

Winkens et al., (2018) [166]	Assessment of floor dust of children's bedroom, Finland	Participants were instructed not to vacuum clean the room at least a week before sampling. A polyester sampling sock was imposed into the nozzle of a vacuum cleaner with which the entire floor of the child's bedroom was vacuum cleaned. Each dust sample was sieved with 0.5mm mesh size for several minutes.	65 children's bedrooms	1 week
Xu et al., (2016) [167]	Comprehensive study of flame retardants in air, dust and hand wipes, Norway	Air: SKC Legacy Low volume pump connected with 4 ENV+SPE cartridges in parallel in living room for 24h. Airflow of 1-1.2L/min for each cartridge. Floor dust: vacuumed from participants living room floors with industrial vacuum cleaner fitted with a dust sampling filter. room not vacuumed for 2-3 weeks before hand. Surface dust: collected from surface of furniture and decorative items in same rooms. large particles e.g., hair, food, stones. removed from dust samples. Analysed by GC-EI-MS	58 samples	Not specified

Supplementary Table – Summary of concentration papers included in the analysis.

Zhou et al., (2017) [168]	Flame retardants in indoor and outdoor air, Germany	low volume vacuum pump connected with a gas meter. Air pumped through a quartz fibre filter followed by a polyurethane foam plug. Air flow rate was 8L/min	7 samples	12 to 24 hours