

Summary Table

Indicative Use	Number of Sites	Fluvial / Tidal Flood Zone Coverage										Risk of Flooding from Surface Water					
		Flood Zone 1		Flood Zone 2		Flood Zone 3a		Flood Zone 3b		Low Risk (1 in 1000 year outline)		Medium Risk (1 in 100 year outline)		High Risk (1 in 30 year outline)			
		Area (ha)	No. 100%	Area (ha)	No.	Area (ha)	No.	Area (ha)	No.	Area (ha)	No.	Area (ha)	No.	Area (ha)	No.	Area (ha)	No.
Residential	104	5763.22	56.00	67.73	47.00	227.75	46.00	158.90	34.00	603.83	103.00	222.35	102.00	119.19	94.00		
Mixed Use	2	91.85	2.00	0.00	0.00	0.00	0.00	0.00	0.00	11.34	2.00	4.29	2.00	2.37	2.00		
Hospital development	3	46.96	1.00	1.68	1.00	1.66	2.00	3.85	2.00	16.62	3.00	7.63	3.00	1.49	3.00		
Recreational / Open Space	9	597.20	3.00	11.73	5.00	63.26	5.00	13.72	4.00	29.70	9.00	9.22	9.00	4.86	8.00		
Caravan Site	2	205.29	1.00	4.85	1.00	101.08	1.00	60.27	1.00	17.08	2.00	2.23	1.00	0.82	1.00		
TOTAL	120	6107.32	63.00	85.99	54.00	393.75	54.00	236.74	41.00	678.58	119.00	245.71	117.00	128.73	108.00		

Key

Flood Zone 3b	The colour coding shows the highest risk element of the flood zone that is present on site and is not in itself an indication of whether the site should or shouldn't be developed for flooding reason
Flood Zone 3a	
Flood Zone 2	
Flood Zone 1 + Surface Water	
Flood Zone 1	

Main Table

Site Reference	Site Name	Indicative Use	Fluvial / Tidal Flood Zone Coverage										Risk of Flooding from Surface Water						Significant Surface Water Risk?	Flood Risk Vulnerability Classification (NPPF)	Level 1 Strategic Recommendation (see SFRA)	Development Considerations	Council Comments	JBA comments
			Flood Zone 1		Flood Zone 2		Flood Zone 3a		Flood Zone 3b		Low Risk (1 in 1000 year outline)		Medium Risk (1 in 100 year outline)		High Risk (1 in 30 year outline)									
			Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%						
SP001	North of Greasby	Residential	47.18	89.78	42.36	1.57	3.32	0.25	0.52	3.01	6.37	8.56	18.14	3.49	7.40	1.42	3.01	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA: Network of main river and ordinary watercourses at site. SW flood risk (25%) mostly associated with these. FZ3b associated with main river corridor.		
SP002	West of Saughall Massie	Residential	115.66	98.15	113.52	1.36	1.18	0.78	0.67	0.00	0.00	11.60	10.03	4.64	4.01	3.26	2.81	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA: SW flood risk across 14% site		
SP003	Saughall Massie Conservation Area	Residential	11.58	95.19	11.02	0.38	3.29	0.03	0.30	0.14	1.22	1.17	10.08	0.61	5.25	0.19	1.66	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA: agree SW & FZ associated with main river corridor		
SP004	North of Saughall Massie	Residential	8.98	70.79	8.36	1.41	15.74	0.44	4.86	0.77	8.81	3.38	37.77	1.70	18.88	0.58	6.19	Yes	More Vulnerable	Recommendation A	Development may be potentially unsuitable based on SW flood risk (if development cannot be directed away from risk areas, the site will be unsuitable for development)	LLFA: Main River Arroye Brook at east edge of site. SW & FZ associated primarily with this corridor. Ordinary watercourse present		
SP005	East of Garden Hey Road	Residential	1.40	100.00	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	No	More Vulnerable	Recommendation D	Development could be allocated on flood risk grounds subject to consultation with the LPA / LLFA	LLFA: minimal SW flood risk		
SP006	North of Frankby Road	Residential	153.31	90.99	139.50	2.77	1.81	0.08	0.05	10.97	7.15	17.28	11.27	5.46	3.56	2.96	1.93	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA: Network of main river and ordinary watercourses at site. SW flood risk mostly associated with these. FZ3b associated with main river corridor.		
SP007	North of Hilbart Road	Residential	44.84	60.67	27.25	0.02	0.04	0.03	0.06	17.58	39.29	5.05	11.27	1.35	3.00	0.57	1.26	No	More Vulnerable	Recommendation A	Development may be potentially unsuitable based on fluvial / tidal flood risk (if development cannot be directed away from risk areas, the site will be unsuitable for development)	LLFA: FZ3b at west half of site associated with Greasby Brook		
SP008	East of Newton	Residential	88.82	100.00	88.82	0.00	0.00	0.00	0.00	0.00	0.00	7.60	8.58	2.20	2.48	1.08	1.22	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA: SW flood risk around main river corridor		
SP009	North of Thorstone Drive, Irtby	Recreational / Open Space	181.68	96.23	174.83	0.00	0.00	0.00	0.00	6.85	3.77	3.20	1.76	1.20	0.66	0.63	0.35	No	Water compatible	Recommendation D	Development could be allocated on flood risk grounds subject to consultation with the LPA / LLFA	LLFA: FZ3b at north end of site associated with Greasby Brook		
SP010	North of Arroye Brook Lane	Residential	63.68	99.998901	63.676382	0.000700	0.001099	0.000000	0.000000	0.000000	0.000000	2.62	4.12	1.23	1.93	0.83	1.31	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA: FZ2 limited to width of site boundary. Surface water run-off on site contributes to property flooding at Rigby Drive and Arroye Road. Consideration of attenuation measures as part of design would alleviate flood risk elsewhere		
SP011	North of Irtby	Residential	43.47	99.76	43.37	0.06	0.14	0.00	0.00	0.05	0.10	4.02	9.25	1.05	2.41	0.42	0.97	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA: Agree. Ordinary watercourses & pond features present at the south end of the site		
SP012	Pikes Hey Road	Residential	10.01	100.00	10.01	0.00	0.00	0.00	0.00	0.00	0.00	0.66	6.59	0.14	1.45	0.01	0.13	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA: Agree		
SP013	West of Column Road	Residential	36.16	100.00	36.16	0.00	0.00	0.00	0.00	0.00	0.00	3.88	10.72	1.70	4.71	0.35	0.97	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA: multiple ordinary watercourse & significant SW flood risk towards east of site		
SP014	North of Hilbre High School	Residential	19.50	100.00	19.50	0.00	0.00	0.00	0.00	0.00	0.00	2.76	14.13	1.32	6.75	0.82	4.21	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA: SW flood risk across 14% site. SW flooding impacts on highway at west end of site. Main River (Newton Brook) crosses site		
SP015	Upper Birket Valley	Residential	427.82	62.22	266.20	35.38	8.27	103.46	24.16	22.79	5.33	86.81	20.29	29.80	6.97	12.24	2.86	No	More Vulnerable	Recommendation B	Exception Test required	LLFA: Hoylake Golf Resort 27% SW flood risk across site		
SP016	West of Meols Drive	Recreational / Open Space	81.21	93.51	75.94	1.66	2.05	3.61	4.45	0.00	0.00	1.53	1.88	0.12	0.15	0.01	0.02	No	Water compatible	Recommendation D	Development could be allocated on flood risk grounds subject to consultation with the LPA / LLFA	LLFA: Agree		
SP017	North of Birkenhead Road	Residential	69.82	31.99	22.34	1.52	2.18	45.63	65.35	0.34	0.48	15.35	21.99	1.98	2.83	0.30	0.43	No	More Vulnerable	Recommendation B	Exception Test required	LLFA: agree < 0.5% in FZ2b, 65% in FZ3a, 24% @SW Flood Risk		
SP018	Moreton Coastal Plain	Caravan Site	196.92	15.60	30.72	4.85	2.47	101.08	51.33	60.27	30.61	17.07	8.67	2.23	1.13	0.82	0.42	No	Highly Vulnerable	Recommendation A	Development may be potentially unsuitable based on fluvial / tidal flood risk (if development cannot be directed away from risk areas, the site will be unsuitable for development)	LLFA: Agree > 30% in FZ3b		
SP019	West of Arroye Park	Residential	100.75	97.33	98.06	0.91	0.90	0.00	0.00	1.78	1.76	8.79	6.73	3.35	3.33	1.86	1.84	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA: FZ 3b at southern boundary with Arroye Brook. SW Flood Risk at 12%		
SP020	Arroye Country Park	Recreational / Open Space	171.17	98.84	169.20	0.13	0.07	0.05	0.03	1.80	1.05	10.96	6.40	4.73	2.77	3.07	1.70	No	Water compatible	Recommendation D	Development could be allocated on flood risk grounds subject to consultation with the LPA / LLFA	LLFA: Agree		
SP020A	Arroye Park Hospital Major Developed Site	Hospital development	12.16	100.00	12.16	0.00	0.00	0.00	0.00	0.00	0.00	0.66	5.40	0.14	1.12	0.03	0.27	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA: Agree		
SP021	Leasowe Coast	Residential	170.70	85.83	146.18	5.85	3.42	13.72	8.04	4.85	2.90	7.91	4.63	2.28	1.33	1.06	0.62	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA: Agree with assessment as a whole however western 30% of site mostly FZ3b - consider re-classification as potentially unsuitable for development based on fluvial/tidal flood risk	Still Recommendation C as site can be developed outside of flood risk areas (eastern side). Consider redrawing site boundary away from flood risk.	
SP022	M53 Corridor East of Leasowe	Recreational / Open Space	78.49	7.89	6.19	9.45	12.04	59.26	75.50	3.59	4.58	7.12	9.07	1.23	1.57	0.19	0.25	No	Water compatible	Recommendation D	Development could be allocated on flood risk grounds subject to consultation with the LPA / LLFA	LLFA: 75% of site FZ3a. Would question development here - consider re-classification as potentially unsuitable	The indicative use of this site is recreational / open space and has been assessed as a 'Water compatible' site (e.g. pitch/playing field) and therefore in accordance with Flood Risk Vulnerability Classification (FRCC-PPG), water compatible sites can be developed with 75% in FZ3a	
SP023	M53 Corridor North of Fender Lane	Residential	19.44	0.74	0.14	0.02	0.12	10.56	54.31	8.71	44.83	1.62	8.32	0.32	1.64	0.02	0.12	No	More Vulnerable	Recommendation A	Development may be potentially unsuitable based on fluvial / tidal flood risk (if development cannot be directed away from risk areas, the site will be unsuitable for development)	LLFA: Agree		
SP024	M53 Corridor East of Moreton	Residential	44.45	27.67	12.30	1.36	3.06	10.92	24.57	19.87	44.70	20.50	46.12	1.96	4.42	0.98	2.21	No	More Vulnerable	Recommendation A	Development may be potentially unsuitable based on fluvial / tidal flood risk (if development cannot be directed away from risk areas, the site will be unsuitable for development)	LLFA: Agree		
SP025	M53 Corridor East of Upton	Residential	13.62	88.59	12.07	0.36	2.65	0.06	0.47	1.13	6.29	8.63	63.33	2.68	19.67	1.31	5.63	Yes	More Vulnerable	Recommendation A	Development may be potentially unsuitable based on SW flood risk (if development cannot be directed away from risk areas, the site will be unsuitable for development)	LLFA: Agree		
SP026	M53 Corridor East of Woodchurch	Residential	40.62	100.00	40.62	0.00	0.00	0.00	0.00	0.00	0.00	10.51	25.87	4.75	11.69	2.09	5.14	Yes	More Vulnerable	Recommendation A	Development may be potentially unsuitable based on SW flood risk (if development cannot be directed away from risk areas, the site will be unsuitable for development)	LLFA: SW Flood Risk <50% at 37%. Consider whether development could be allocated subject to consultation.		
SP027	M53 Corridor West of Bidston Moss	Residential	28.39	15.58	4.42	0.68	2.41	17.51	61.66	5.78	20.35	4.18	14.72	0.19	0.67	0.03	0.12	No	More Vulnerable	Recommendation A	Development may be potentially unsuitable based on fluvial / tidal flood risk (if development cannot be directed away from risk areas, the site will be unsuitable for development)	LLFA: Agree		
SP028	M53 Corridor West of Beechwood	Residential	27.85	51.59	14.37	0.34	1.23	12.71	45.63	0.43	1.55	9.41	33.80	0.92	3.29	0.46	1.84	No	More Vulnerable	Recommendation B	Exception Test required	LLFA: Agree		
SP029	M53 Corridor West of Nocturnum	Residential	11.33	80.69	9.14	0.07	0.63	0.03	0.24	2.09	18.45	4.48	39.50	2.21	19.54	1.51	13.34	Yes	More Vulnerable	Recommendation A	Development may be potentially unsuitable based on fluvial / tidal and SW flood risk (if development cannot be directed away from risk areas, the site will be unsuitable for development)	LLFA: Agree		

SP082	West of Hargrave Lane	Residential	104.64	103.95	99.34	0.09	0.08	0.01	0.01	0.59	0.56	5.06	4.84	2.34	2.24	1.68	1.61	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : agree, FZ3b associated with ordinary watercourse at north-east of parcel
SP083	North of Willow Lane	Residential	55.83	55.83	100.00	0.00	0.00	0.00	0.00	0.00	0.00	2.54	4.54	0.63	1.14	0.30	0.54	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : agree
SP084	Raby Village Infill Village	Residential	4.04	4.04	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	No	More Vulnerable	Recommendation D	Development could be allocated on flood risk grounds subject to consultation with the LPA / LLFA	LLFA : agree
SP085	West of Willowbrow Road	Residential	95.16	95.16	100.00	0.00	0.00	0.00	0.00	0.00	0.00	1.71	1.80	0.19	0.20	0.05	0.05	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : agree
SP086	South of Willow Lane	Residential	24.02	24.02	100.00	0.00	0.00	0.00	0.00	0.00	0.00	2.29	9.53	0.62	2.56	0.19	0.80	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : Agree 13% SW Flood risk. Ordinary watercourses present
SP087	South of Benty Heath Lane	Residential	115.19	115.19	100.00	0.00	0.00	0.00	0.00	0.00	0.00	9.85	8.55	4.34	3.77	2.91	2.52	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : Agree 15% SW Flood risk. Ordinary watercourses present
SP088	East of Hargrave Lane	Residential	22.53	22.53	100.00	0.00	0.00	0.00	0.00	0.00	0.00	1.56	6.91	0.53	2.37	0.33	1.46	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LFA : agree
SP089	South of Gayton	Residential	74.54	74.54	100.00	0.00	0.00	0.00	0.00	0.00	0.00	6.91	9.27	2.63	3.52	1.20	1.61	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : Agree 12% SW Flood risk. Ordinary watercourses present
SP090	Gayton Village Conservation Area	Residential	8.45	8.45	100.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02	12.02	0.50	5.90	0.24	2.90	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : Agree 17% SW Flood risk. Ordinary watercourses present
SP091	Frankby Village Conservation Area	Residential	5.28	5.28	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	9.47	0.15	2.93	0.09	1.62	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : Agree 12% site at SW flood risk
SP092	Dee Coast North of Croft Drive	Residential	6.06	6.02	99.95	0.01	0.16	0.03	0.49	0.00	0.00	0.51	8.37	0.17	2.74	0.06	0.91	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : FZ3a at seaward edge of site. Long term SMP Policy is for Hold The Line subject to private funding agreement for coastal defences. Erosion risk and future maintenance of defences an issue here
SP093	Dee Coast South of Croft Drive	Residential	26.78	26.75	99.90	0.02	0.08	0.01	0.02	0.00	0.00	0.94	3.51	0.42	1.58	0.22	0.83	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : FZ3a at seaward edge of site. Medium & Long term SMP Policy is for Hold The Line subject to private funding agreement for coastal defences. Erosion risk and future maintenance of defences an issue here
SP094	Dee Coast South of Caldys Bluffs Slipway	Caravan Site	8.37	8.37	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.15	0.00	0.00	0.00	0.00	No	Highly Vulnerable	Recommendation B	Development could be allocated on flood risk grounds subject to consultation with the LPA / LLFA	LLFA : Short, Medium & Long Term No Active Intervention SMP Policy. No coastal defences present to reduce erosion risk
SP095	Dee Coast South of Station Road	Residential	32.15	32.15	100.00	0.00	0.00	0.00	0.00	0.00	0.00	1.83	5.71	0.78	2.41	0.42	1.31	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : Short, Medium & Long Term No Active Intervention SMP Policy. No coastal defences present to reduce erosion risk
SP096	Dee Coast North of Broad Lane	Residential	24.47	24.47	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	2.90	0.09	0.36	0.05	0.20	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : Agree
SP097	Dee Coast South of Broad Lane	Residential	29.11	28.95	90.51	0.68	2.94	1.81	6.23	0.27	0.93	4.68	16.09	1.97	6.76	0.95	3.26	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : Short Medium & Long Term No Active Intervention Policy where undefended. Limited interventions where defended
SP098	Dee Coast South of Banks Road	Residential	21.53	20.87	96.94	0.07	0.33	0.59	2.73	0.00	0.00	2.21	10.27	0.21	0.99	0.04	0.20	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : Short Medium & Long Term No Active Intervention Policy where undefended. Limited interventions where defended. Ordinary watercourse on site
SP099	Dee Coast Park West	Residential	6.00	5.99	99.67	0.01	0.14	0.01	0.19	0.00	0.00	0.37	6.21	0.05	0.78	0.03	0.50	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : Short Medium & Long Term No Active Intervention Policy where undefended. Limited interventions where defended
SP100	Dee Coast North of Manners Lane	Residential	5.36	5.36	100.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	22.30	0.07	1.39	0.03	0.53	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : Short Medium & Long Term No Active Intervention Policy where undefended. Limited interventions where defended
SP101	Dee Coast South of Manners Lane	Residential	2.83	2.83	100.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50	52.84	0.14	4.79	0.05	1.59	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : Short Medium & Long Term No Active Intervention Policy where undefended. Limited interventions where defended
SP102	Dee Coast Seabank Road	Residential	3.40	3.39	99.76	0.01	0.21	0.00	0.02	0.00	0.00	1.04	30.54	0.26	7.70	0.00	0.13	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : Short Medium & Long Term No Active Intervention Policy where undefended. Limited interventions where defended
SP103	Dee Coast North of Riverbank Road	Residential	11.62	11.62	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55	4.77	0.30	2.62	0.26	2.28	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : Short Medium & Long Term No Active Intervention Policy where undefended. Limited interventions where defended
SP104	Dee Coast South of Riverbank Road	Residential	17.34	17.31	99.85	0.01	0.05	0.02	0.09	0.00	0.00	0.33	1.92	0.13	0.76	0.12	0.67	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : Short Medium & Long Term No Active Intervention Policy where undefended. Limited interventions where defended
SP105	Dee Coast Cottage Drive West	Residential	6.31	6.02	95.48	0.09	1.38	0.20	3.14	0.00	0.00	1.69	26.83	0.63	10.06	0.22	3.45	Yes	More Vulnerable	Recommendation A	Development may be potentially unsuitable based on SW flood risk (if development cannot be directed away from risk areas, the site will be unsuitable for development)	LLFA : Short Medium & Long Term No Active Intervention Policy where undefended. Limited interventions where defended
SP106	Dee Coast South of Cottage Lane	Residential	30.33	28.14	86.17	1.44	4.76	2.75	9.08	0.00	0.00	8.34	27.50	2.97	9.80	1.31	4.33	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : Short Medium & Long Term No Active Intervention Policy where undefended. Limited interventions where defended
SP107	MS3 Junction 1 Roundabout	Residential	2.11	1.73	82.08	0.32	15.33	0.05	2.60	0.00	0.00	0.06	2.82	0.01	0.67	0.00	0.03	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : Agree
SP108	Land at Wallasey Loop	Residential	4.71	4.36	92.60	0.32	6.69	0.03	0.71	0.00	0.00	0.26	5.50	0.15	3.26	0.09	1.98	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	LLFA : Agree
SP109	Land at Boathouse Lane, Gayton	Residential	0.19	0.19	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	51.07	0.02	10.60	0.00	0.00	Yes	More Vulnerable	Recommendation A	Development may be potentially unsuitable based on SW flood risk (if development cannot be directed away from risk areas, the site will be unsuitable for development)	LLFA : agree - ponds and ordinary watercourses on site
SP110	East of Wittering Lane, Lower Heswall	Residential	2.78	2.78	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	5.79	0.01	0.39	0.00	0.00	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	
SP111	South of Clatterbridge Road	Residential	5.72	5.72	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	12.13	0.03	0.57	0.00	0.00	No	More Vulnerable	Recommendation C	Consider site layout and design around flood risk	