

# Playgrounds Hazards and Defects Checklist

<b>Site:</b>					
<b>Inspector:</b>		<b>Signed:</b>		<b>Date:</b>	

For each hazard and defect identified in a playground a risk assessment should be undertaken to assist with prioritising works. The following needs to be determined:

- The likelihood of an accident occurring (ie. no chance to highly probable).
- The expected consequences of the accident (eg. minor to permanent injury).

This is then used to determine the **Level of Risk** of the hazard using the matrix shown below.

Injury Type		Little/None 1	Minor 2	Moderate 3	Serious 4	Permanent 5
Highly unlikely	E <sup>(1)</sup>	Very Low (1)	Very Low (2)	Low (3)	Low (4)	Moderate (5)
Unlikely	D <sup>(2)</sup>	Very Low (2)	Low (4)	Moderate (6)	Moderate (8)	High (10)
Possible	C <sup>(3)</sup>	Low (3)	Moderate (6)	Moderate (9)	High (12)	High (15)
Likely	B <sup>(4)</sup>	Low (4)	Moderate (8)	High (12)	High (16)	Extreme (20)
Very likely	A <sup>(5)</sup>	Moderate (5)	High (10)	High (15)	Extreme (20)	Extreme (25)

As assessments of likelihood and consequence are subjective and likely to differ over time and between individuals, some hazards and defects are listed on the next page to provide consistency.

## Identified Hazards and Defects

Description	List ID (1-40)	Level of Risk (eg. C3 High)	Work Required / Hazard Control Measure	Person Responsible	Date Work Completed & Signature
			<b>DRAFT</b> (for discussion purposes only)		

### **Expected Injury Type Examples:**

- |  |   |
|--|---|
| 1 (Little/None) - scratches, pinching, minor bruising                              | 2 (Minor) - surface cuts, major bruising              |
| 3 (Moderate) - deep cuts (stitches), hairline fracture                             | 4 (Serious) - full fracture, digital amputation/crush |
| 5 (Permanent) - amputation/crush (non-digital), spinal damage, brain damage, death |   |

## Hazards and Defects List

This list provides scores for likelihood and consequence that could be used for hazards and defects. However, it is important to note that the actual scores to be applied to any given hazard may differ than those listed depending on the circumstances of the hazard. That is, the scores provided are for guidance only.

	Description	Injury Likelihood	Injury Type	Level of Risk
<b>Protection Against Falling</b>				
1	Free height of fall >2.5m (or 2.2m for upper body equipment or 1.5m for SEC)	C	5	High
2	Inadequate stair/ramp handrails (should be 2 on each side or 1 for SEC) (Note if a stairway has barrier instead of handrails then this is adequate protection)	D	3	Moderate
3	Inadequate barriers (>900mm or >700mm for decks 0.5-1.2m high)	C	4	High
4	No hand supports in openings (eg. D-grips or vertical handrails)	D	3	Moderate
5	Openings >800mm high or wider than the adjoining assembly	D	2	Low
6	Unintended access to tops of barriers or rooves (foot supports <500mm apart)	D	4	Moderate
<b>Finish of Equipment</b> (risk highly dependant on location and condition of finish)				
7	Protruding nails	B	2	Moderate
8	Protruding bolt threads	C	2	Moderate
9	Other protrusions and sharp edges	C	3	Moderate
10	Rough surfaces (eg. splintered timber, worn plyboard)	C	2	Moderate
<b>DRAFT</b> (for discussion purposes only)				
<b>Moving Parts</b>				
11	Crush points or shearing points (eg. between loose clatter bridge timbers)	C	3	Moderate
12	Un-attenuated impact forces (eg. no rubber stoppers at ends of track glide)	D	3	Moderate
<b>Entrapments</b> (level of risk depends on height, eg a 200mm wide gap at a height of 1.0m is low risk as a person this size could easily stand up)				
13a	Feet first head entrapment (89-125mm gaps usually in barriers built before 2005)	E	5	Moderate
13b	Feet first head entrapment that need to be climbed into to access (eg. 89-125mm gaps in D-grips built before 2005)	E	3	Low
13c	Low down wide head entrapment (eg. gap >200mm at height<1.2m)	E	5	Moderate
13d	Other General head entrapments (89-230mm gaps)	B to D	5	High/Extreme
14	Neck entrapments (eg V's <60 degrees, unbound top openings >45mm wide)	B to D	5	High/Extreme
15	Clothing entrapments (eg. gaps or V's, protrusions, spindles and rotating parts)	E	5	Moderate
16	Foot or leg entrapments (eg. gaps > 30mm aligned in the direction of travel)	D	2	Low
17	Finger entrapments (eg: 8-25mm holes/gaps >1.2m high or in free space)	C	4	High
<b>Zones</b>				
18	Fall zone overlapping free space of adjacent equipment.	E	4	Low
19	Inadequate fall zone dimensions (1.5-2.5m depending on FHOE; specific requirement for swings, slides, rockers, etc)	B	4 or 5	High/Extreme
20	Obstacles within the fall zone	B	5	Extreme
21	Inadequate impact attenuation (eg. insufficient mulch depth)	B to D	4	High/Extreme
<b>Access</b>				
22	Inadequate ladder (eg. rung spacing>300mm)	D	2	Low
23	Inadequate stairway (eg. rise>220mm, gaps btwn treads when viewed from above)	C	2	Moderate
24	Inadequate ramp (eg. gradient>15degrees, variable gradient, slippery surface)	D	3	Moderate
<b>Slides</b>				
25	No rail across the opening or horizontal handrails either side of the opening	D	3	Moderate
26	No rail across the opening but there are horizontal handrails/D-grips.	E	2	Low
27	End height >350mm (or >200mm for slides <1.5m long)	D	3	Moderate
<b>Swings</b>				
28	Seat heights <350mm high when laden (with rubber or 300mm deep mulch)	C	3	Moderate
29	Cradle seat missing belly chain or chain lock.	B	3	High
30	Shackle bolts and top fitting loose, with excess play or corrosion	D	3	Moderate
<b>Other General Hazards and Defects</b>				
31	Chain openings too large (ie. >8.6mm and not covered with rubber hosing)	C	3	Moderate
32	Trip points (eg. tree roots, exposed footings, loose rubber)	B to D	3	Moderate/High
33	Missing parts (eg. missing steering wheel)	E	1	Low
34	Loose joints, cracked welds (risk highly variable depending on defect)	D	3	Moderate
35	Uncapped steel sections (higher risk if finger entrapment size)	E	1	Low
36	Warped decking (potential trip points, indication of wear)	C	3	Moderate
37	Broken or distorted members/supports (risk highly variable depending on defect)	C	4	High
38	Significant rusting (ie. not surface rust, risk highly variable on rust extent)	D	3	Moderate
39	Burns (eg. friction burns on ropes or sliding surfaces. North facing unshaded slides)	D	3	Moderate
40	Other (risk highly variable depending on hazard/defect)			

Notes: Risk assessment is required as typically across an organisation's playgrounds there will be many defects, non-conformances and safety issues. It is impossible to address all issues concurrently, hence a programme of works based on risk needs to be followed. Other factors may also need to be taken into account such as Benefits of play and costs.

Matrix based on the principles of AS/NZS 4360: 2004, *Risk Management* and on the RoSPA *Risk Assessment of Children's Playgrounds 2005* manual authored by Dr David Eager of the University of Technology Sydney.

However the matrix above has more Extreme and High levels than typically used for risk assessment matrices and that used by RoSPA. It is up to organisations to decide exactly how they want the Levels of Risk distributed across the matrix.