



## Module II: Hazard Prevention Program

### ANNEX C: Hazard Ranking Matrix

#### Definitions:

PROBABILITY	
<b>Highly Likely</b>	Likely to occur several times this year; has happened several times before
<b>Likely</b>	Expected to occur more than once a year
<b>Possible</b>	Expected to occur at least once; foreseeable under unusual circumstances
<b>Unlikely</b>	Not expected to occur; has never happened before; no known history; unlikely sequence of events

FREQUENCY (Exposure)	
<b>Frequent</b>	Occurs one or more times per day
<b>Regular</b>	Occurs one or more times per week
<b>Occasional</b>	Occur one or more times per month or season
<b>Rare</b>	Occurs rarely or has never occurred, but is possible

LIKELIHOOD	
<b>Almost certain</b>	The most likely and expected result if a hazard exists
<b>Quite Possible</b>	Not an unusual occurrence
<b>Remotely Possible</b>	Unusual occurrence or possible, occurred in the past
<b>Unlikely</b>	Has not or never occurred but is conceivable



**Step 1: Identify the Probability**  
(Frequency x Likelihood = Probability)

<b>PROBABILITY</b> (Frequency x Likelihood = Probability)					
<b>Frequency</b>	<b>Likelihood</b>				
		<i>Unlikely</i>	<i>Remotely Possible</i>	<i>Quite Possible</i>	<i>Almost certain</i>
	<i>Frequent</i>	Possible	Likely	Highly Likely	Highly Likely
	<i>Regular</i>	Possible	Possible	Likely	Highly Likely
	<i>Occasional</i>	Unlikely	Possible	Likely	Likely
	<i>Rare</i>	Unlikely	Unlikely	Likely	Likely

**Step 2 – Identify the SEVERITY**  
If the hazard were to occur, the following would result (pick appropriate one)

<b>SEVERITY</b>	
<b>Critical</b>	Fatality or permanently disabling injury or illness; limb amputation, major fracture, burn on a large part of the body
<b>Severe</b>	Disabling injury resulting in loss of work time; laceration, burn on several parts of the body
<b>Serious</b>	Minor injury; sprain, light burn
<b>Minimal</b>	Non-disabling injury

**Step 3 – Hazard Ranking: (Probability x Severity)**

Based on the definitions of Probability and Severity, identify where the hazard lies on the matrix.

		<b>SEVERITY</b>			
		<i>Minimal</i>	<i>Serious</i>	<i>Severe</i>	<i>Critical</i>
<b>PROBABILITY</b>	<i>Highly Likely</i>	C	B	A	A
	<i>Likely</i>	C	C	B	A
	<i>Possible</i>	D	C	B	B
	<i>Unlikely</i>	D	D	C	C



## Hazard Levels

- A** These hazards are the highest ranking and require an action plan to identify and implement preventive measures. These hazards are a priority as they could result in a significant disabling injury if adequate preventive measures are not implemented.
- B** Hazards are also considered to require immediate attention. An action plan should be developed in order to implement appropriate preventive measures.
- C** Hazards are hazards that have a relatively low level of severity. This group should never be ignored but are not a priority
- D** Hazards are the lowest level but should not be ignored. No immediate action plan is required.

*Note: these ratings are made without taking into consideration the presence of preventive measures. Once preventive measures are introduced, the rating will be lowered, as the hazard will be well controlled.*