REPORT ON IMPACT OF OCCUPANCY NUMBERS ON LICENSED PREMISES AS A RESULT OF COVID-19

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Client: Licensed Vintners Association (LVA) & Vintners’ Federation of Ireland (VFI)
0.1 Introduction

We have been engaged by the Licensed Vintners Association (LVA) & Vintners’ Federation of Ireland (VFI) to assess the potential reduction of occupancy numbers in Licensed Premises as a result of physical distancing rules from the Health Service Executive (HSE) and World Health Organisation (WHO).

We have looked at a number of occupancy scenarios in a Pub & Restaurant and have assessed an arbitrary 100m² area where there could be standing and seating. We have calculated the maximum permitted occupancy under the Fire Safety Building Regulations (Table 1.1 of Technical Guidance Document B). We have applied a 2m wide physical distancing requirement as specified by the HSE and a 1m wide physical distancing requirement specified by the WHO. We have also assumed, for the analysis on the HSE seating scenario, that any 2 persons sharing a table are from the same family and are in self isolation together.

We have also carried out a desktop study on the impact of the Covid-19 on the occupancy of a typical Bar & Restaurant (140m² Public Area) where we have quantified the occupancy before and after applying HSE and WHO physical distancing requirements.

1.0 Impact on Covid-19 physical distancing on an arbitrary 100m² floor area, used for standing

1.1 Max Occupancy of 100m² room or floor area used for standing prior to Covid-19

The maximum occupancy of a space used for standing in a licensed premises is calculated by applying an occupancy load factor of 2 persons per square metre, as prescribed in the Fire Safety Building Regulations (Table 1.1 Technical Guidance Document B), which amounts to a maximum occupancy of 200 persons in a 100m² floor area. This maximum occupancy is contingent on having sufficient exits available from the room or space.

![Figure 1](image-url)
1.2 Maximum occupancy of 100m² room or floor area for standing after applying WHO physical distancing guidelines of 1m between people

It is noted that when a 1m physical distancing separation is applied, the occupancy decreased from 200 persons to 100 persons, which is a reduction to 50% of the existing capacity – see figure 2 below:

![Figure 2](image)

Occupancy - 100 persons.

Figure 2

1.3 Maximum occupancy of room or floor area for standing after applying HSE physical distancing guidelines of 2m between people.

It is noted that when a 2m physical distancing separation is applied, the occupancy decreased from 200 persons to 25, which is a decrease to 12.5% of the existing capacity – see figure 3 below:

![Figure 3](image)

Occupancy - 25 persons.

Figure 3
2.0 Impact on Covid-19 physical distancing on an arbitrary 100m² floor area used for sitting/dining in a Bar/Restaurant

2.1 Max Occupancy of 100m² room or floor area used for seating prior to Covid-19

The maximum occupancy of a space used for seating in a licensed premises (bar/restaurant) is calculated by applying an occupancy load factor of 1 persons per square metre, as prescribed in the Fire Safety Building Regulations (Table 1.1 of Technical Guidance Document B), which amounts to a maximum occupancy of 100 persons in a 100m² room or floor area. We have indicated a typical seating arrangement in Figure 4 below using circular tables as detailed in the 'New Metric Handbook for Planning & Design' where this seating arrangement will give a maximum occupancy of 1 person per m² which corresponds with the maximum permitted occupancy allowed under the Fire Safety Building Regulations.

![Figure 4](image)

**Figure 4**

2.2 Maximum occupancy of 100m² room/floor area used for seating after applying WHO physical distancing guidelines of 1m between people

It is noted that when a 1m physical distancing separation is applied the occupancy decreased from 100 persons to 65 persons which is a reduction of 35% in the overall capacity– see figure 5 below:

![Figure 5](image)

**Figure 5**
2.3 Maximum occupancy of 100m² room or floor area for seating after applying HSE physical distancing guidelines of 2m between people

It is noted that when a 2m physical distancing separation is applied, the occupancy decreased from 200 persons to 34 persons which is a 64% reduction – see figure 6 below:

Figure 6
3.0 Impact on Covid-19 physical distancing on typical Bar/Restaurant Layout

We have also carried out an analysis on a typical Bar/Restaurant (if such a thing exists) with seating and standing areas quantified before and after physical distancing regulations applied and allowing for screening of Bar counter to protect staff (see below):

3.1 Occupancy before Covid-19 Restrictions

Figure 7a– Occupancy before Covid-19 Restrictions
3.2 Occupancy after Covid-19 (WHO Restrictions of 1m)

Figure 7b – Occupancy after Covid-19 Restrictions (WHO Restrictions of 1m)

3.3 Occupancy after Covid-19 (HSE Restrictions of 2m)

Figure 7c – Occupancy after Covid-19 Restrictions (HSE Restrictions of 2m)
4.0 Conclusion

We have analysed the reduction of occupancy for the various scenarios below in order to quantify the effect of physical distancing requirements of the WHO and HSE on Pubs & Restaurants as a result of Covid-19. Note the arbitrary figure of 100m$^2$ used for this analysis is a square shape and it is noted that more complex geometries will result in lower occupancies when physical distancing is applied, (i.e. physical distancing will result in a greater reduction in occupancy for narrow, small pubs/restaurants than on those with larger circulation spaces with higher footfalls). It is noted that this is borne out in our findings where we assessed a typical type pub/restaurant (140m$^2$ public area) where we found the reduction of overall occupancy was reduced by 87% as a result of Covid-19 HSE 2m physical distancing restrictions. The overall reduction in capacity would be at around 79% (of the original capacity) if the bar and seating areas were square in shape and were not enclosed but the 87% reduction in capacity figure is a much more representative figure for a typical bar and restaurant layout when the 2m physical distancing restrictions are applied.

We have summarised our findings in the table below for a floor area of 100m$^2$:

**Summary of Findings:**

<table>
<thead>
<tr>
<th>Existing Capacity permitted under Fire Safety Regulations</th>
<th>Capacity after applying WHO 1m physical distancing requirements</th>
<th>Resulting capacity as percentage of existing permitted capacity (WHO)</th>
<th>Capacity after applying 2m HSE physical distancing requirements</th>
<th>Resulting Capacity as percentage of existing permitted capacity (HSE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100m$^2$ Bar/ Lounge Standing</td>
<td>200 persons</td>
<td>100 persons</td>
<td>50%</td>
<td>25 persons</td>
</tr>
<tr>
<td>100m$^2$ Bar/ Lounge Seating with tables</td>
<td>100 persons</td>
<td>65 persons</td>
<td>65%</td>
<td>34 persons</td>
</tr>
</tbody>
</table>