



National Centre
for the Replacement
Refinement & Reduction
of Animals in Research

Grimace Scale Posters: Terms of use

The NC3Rs has produced A3-sized posters of the mouse, rabbit and rat grimace scales for display in laboratory animal facility rooms and corridors to help raise awareness about the scales and familiarise staff with the specific facial action units.

For a full list of available posters and information on and how to implement grimace scales in your facility please see our resource page: <https://www.nc3rs.org.uk/3rs-resources/grimace-scales/>.

Print specifications

The proper use of this poster requires each of the facial action units to be clear and easily discernible, therefore it must be printed by a professional print service at the full A3 size.

This poster in this pdf has been setup to professional print standards and has crops and bleed added. Please use the print specification outlined below and the printer will trim the poster to the finished size.

- Finished Size: 420mm x 297mm (A3 portrait)
- Print specification: Full colour
- Paper specification (ideally): 170gsm silk

If you have any issues, or need the file in another format, please contact enquiries@nc3rs.org.uk.

Circulation and reproduction

The poster in this PDF should not be circulated without this covering page attached to it.

Any requests to reproduce this poster, or to include it in any publications or training materials, should be directed to enquiries@nc3rs.org.uk. You should include how, why and where the poster will be used so that we can consider your case for approval. It is helpful to include any associated text, so we can see the context in which the poster will be put.

Copyright: The attached poster and the content within it are owned by the NC3Rs and its partners. The poster should not be adapted, and the content should not be sold or used to generate income.

兔子痛苦表情评分

研究表明面部表情的改变可以作为评估兔子疼痛的一种方法。

以下所显示的特有的面部行为单位被用来制定兔子痛苦表情分级。这些行为单位的程度随处理后疼痛反应而增加，可以结合其它有效的疼痛指标作为临床评估的一部分。

行为单位仅用于清醒动物，每一个动物应观察足够长的时间，以避免将与动物福利无关的简短的面部表情变化纳入评分。

	行为单位		
	没呈现“0”	中度呈现“1”	明显呈现“2”
眼窝发紧 <ul style="list-style-type: none"> ▪ 眼睑闭合 (眼窝面积变窄) ▪ 眼周可能看到一皱纹 			
面颊变平 <ul style="list-style-type: none"> ▪ 面颊变平。当呈‘明显呈现’时面颊有凹陷表情 ▪ 面部呈多角而少圆滑 			
鼻子形状 <ul style="list-style-type: none"> ▪ 鼻孔被拉垂直呈‘V’而不是‘U’型 ▪ 鼻尖移向下巴(颌) 			
胡须形状和姿势 <ul style="list-style-type: none"> ▪ 胡须被推离面部而呈‘尾部立起’ ▪ 胡须变硬而失去它们自然的，向下的曲线 ▪ 胡须更多地指向相同的方向。当呈‘明显呈现’时，胡须下移 			
耳朵姿势 <ul style="list-style-type: none"> ▪ 耳朵形状变得更紧地折起/或卷起(更圆筒形的) ▪ 耳朵从朝向声源处旋转至朝向臀部 ▪ 耳朵可能保持于更加靠向后背或身体两侧 			

阅读原文献:

Keating SCJ, Thomas AA, Flecknell PA, Leach MC (2012) Evaluation of EMLA cream for preventing pain during tattooing of rabbits: Changes in physiological, behavioural and facial expression responses. PLOS ONE 7(9): e44437. doi:10.1371/journal.pone.0044437

就指导关于如何应用兔子痛苦表情评分，这一技术的基础和有效性的科研文章，以及它在其它动物种类的使用，请访问: www.nc3rs.org.uk/grimacescales

如需求这个海报的复印件，请发电子邮件: enquiries@nc3rs.org.uk

NC3Rs 提供相关3Rs 资源于: www.nc3rs.org.uk/resources

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纽卡斯尔大学的疼痛与动物福利科学组(PAWS)为开发兔子痛苦表情评分提供了必不可少的工作。