

**Agent Summary– Adenovirus vectors** ([http://weill.cornell.edu/ehs/static\\_local/pdfs/Adenovirus.pdf](http://weill.cornell.edu/ehs/static_local/pdfs/Adenovirus.pdf))

**1. Precaution**

Adenovirus is a pathogen of respiratory and gastrointestinal mucous and eye membranes, and can infect cells by the aerosol or droplet route, even when rendered replication defective.

The NIH has assigned any adenovirus to Risk Group 2 (agents that are associated with human disease which is rarely serious and for which preventive or therapeutic interventions are often available).

**Special care** should be used in the evaluation of containment levels for experiments which are likely to either enhance the pathogenicity (e.g., insertion of a host oncogene) or to extend the host range (e.g., introduction of novel control elements) of viral vectors under conditions that permit a productive infection. In such cases, serious consideration should be given to increasing physical containment by at least one level.

This update presents information provided by Robert C. Jamou, Ph.D., Biotechnology Advisor for the National Institutes of Health (NIH) Office of Biotechnology Activities.

**Example of adenovirus vectors:** Adenoviral Expression System 1, Adenoviral Expression System 3, Adenoviral Expression System 3 (Tet-On 3G inducible), the ViralPower Adenoviral Expression System, CMV Adenoviral Expression System, miRNA Adenoviral Expression System, and shRNA Adenoviral Expression System.

2. PPE: follow SOP #2.0 donning and doffing procedure
3. Lab area : \_\_\_\_\_
4. Animal holding area : \_\_\_\_\_
5. Animal procedure area: \_\_\_\_\_