CLAIMS

1. An *in vitro* ~~A~~ method of inhibiting microbial activity, the method comprising:

selecting a medium that is susceptible to H1N1 influenza contamination; and

contacting the medium with methylsulfonylmethane (MSM) at a concentration of about 10% to about 16% of weight by volume, thereby inhibiting H1N1 influenza microbial activity.

2. The method of claim 1, wherein the medium comprises a bodily fluid, a bodily tissue, or a surface.

3. The method of claim 1 or 2, wherein contacting the medium comprises spraying or wiping the medium susceptible to microbial contamination with MSM.

4. The method of claim 3, wherein the surface is a household surface, bedding, coverings, industrial equipment or surface, blood, skin or a combination thereof.

5. The method of any one of claims 1-4, wherein MSM is provided in a composition, wherein said composition is free of bleach or free alcohol or consists essentially of water.

6. The method of any one of claims 1-5, further comprising sterilizing the medium after adding said MSM.

7. The method of any one of claims 1-6, wherein said medium is free from preservatives.

8. The method of any one of claim 1-7, wherein the MSM inhibits the microbial activity by reducing growth rate of H1N1 influenza by at least 50% as compared to the growth rate of H1N1 influenza in the absence of MSM.