What is a HAB?

• A “Harmful Algal Bloom” (HAB) occurs when Blue Green Algae (BGA) has or is likely to produce toxins in amounts that could cause people or animals harm.

• Key term = “Harmful”

• Some BGA produce toxins can harm humans and animals.

• BGA is present in most KS lakes, streams and ponds.

• HAB exposure is most often from recreational activities.
2011 HAB Season

• In 2011, there were 38 water bodies with confirmed HAB

• Each lake/bloom was unique

• Blue Green Algae Cell concentrations & Microcystin toxin levels related but not linear

• Elevated levels of HABs can be a threat to animal/human health
Counties with HAB lakes in 2011

Kansas Counties with Public Lakes Confirmed with Harmful Blue-Green Algal Blooms (HAB) in 2011

2011 Counties with HAB Confirmed

Kansas Department of Health and Environment

Kansas lakes are NOT annually tested for HABs. This map only represents past reports of HABs that have been confirmed by KDHE. This map is to be used for historical data and does not indicate current health of the lake.

Data current as of December 31, 2011
## Lakes with Extended Advisories/Warnings - 2011

<table>
<thead>
<tr>
<th>Lake</th>
<th># Days Adv</th>
<th># Days Warn</th>
<th># Days Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheney</td>
<td>21</td>
<td>11</td>
<td>32</td>
</tr>
<tr>
<td>Big Hill</td>
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<td>0</td>
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</tr>
<tr>
<td>Marion CL</td>
<td>63</td>
<td>28</td>
<td>91</td>
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<tr>
<td>Perry</td>
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<td>7</td>
<td>27</td>
</tr>
<tr>
<td>Milford</td>
<td>28</td>
<td>63</td>
<td>91</td>
</tr>
<tr>
<td>Logan CL</td>
<td>62</td>
<td>49</td>
<td>111</td>
</tr>
</tbody>
</table>
KDHE Roles & Responsibilities

• Responds to HAB complaints in public waters (KSU works with owners of private ponds)

• Performs sample collection and analysis

• Provides public health messaging based upon the conditions tested
Partners’ Roles & Responsibilities

• Lake managers (KDWPT, USACE, etc) work with KDHE to learn of the health risks associated with HAB levels to make decisions regarding access to lakes.

• Signs are posted by lake managers.

• Flood control operations (i.e. releasing the water to control levels) belong to lake managers.
Public Health Messages

Designed to educate public so they can make informed decisions

Public Health Advisory

Public Health Warning
Public Health Advisory

• Issued when BGA cell counts exceed 20,000 but is less than 100,000 cells per milliliter of water or Microcystin concentrations are greater than 4 but less than 20 micrograms per liter of water

• Lake managers post signs
• Discourage direct contact with water
• Local Health Depts, health care providers and veterinarians are notified
• Public Water Supplier notified if needed
• News Release issued
Public Health Warning

• Issued when BGA cell counts exceed 100,000 cells per milliliter of water or Microcystin concentrations are greater than 20 micrograms per liter of water

• Signs are posted
• Recommendation – Prohibit direct contact with water
• Notify local health departments, health care providers and veterinarians
• Notify public water suppliers if needed
• Issue media release
BGA in Kansas Website
Thank you!

Media Contact Information:

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TOLL FREE Number – Listen for Recording of Lake Advisories and Warnings

1-855-HAB-LAKE (1-855-422-5253)