

NYSDOH Hudson River Fish Advisory
Outreach Program Update
Hudson River PCBs Superfund Site
Community Advisory Group October 27, 2016

New York State Department of Health

Hudson River Fish Advisory Outreach

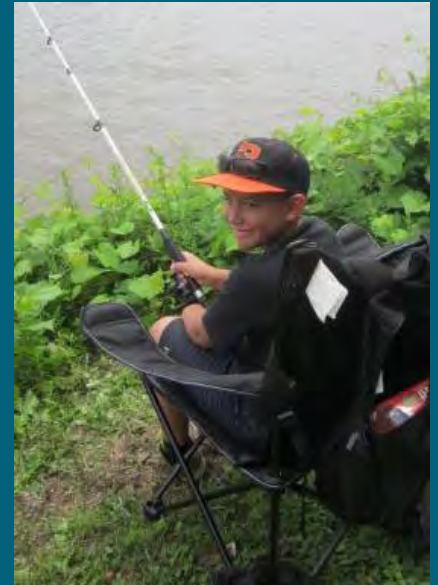


Can you eat that fish from the Hudson River? www.health.ny.gov/fish



Hudson River Fish Advisory Outreach Project

- Scope of Work: Everyone eating Hudson River fish knows, understands and follows the New York State Department of Health (NYSDOH) advice on fish consumption for 192 miles from Hudson Falls to NYC
- Commitment of 20 years through 2027
- Focus on community partnerships



Challenge: Reduce contaminant consumption but not reduce overall healthy fish consumption

Hudson River Fish Advisory Outreach Project Activities

- Identify and support a group of partners who can develop and administer fish advisory outreach programs
- Secure permission from property owners to post signs at major fishing access sites, provide signs and ensure they are posted
- Broadcast public service announcements
- Evaluate outreach efforts to determine which ones are working
- Incorporate emerging health education methods into outreach efforts
- Develop and implement strategies to encourage people to follow the advisories

Hudson Fish Advisory Outreach

What Is the Advice?

- The advice depends upon who you are, where you fish, and what you catch
- Women under 50 (childbearing years) and children under 15 should not eat any Hudson fish or crabs downstream of Corinth in Saratoga County to the New York Battery
- A priority outreach audience is young women with families

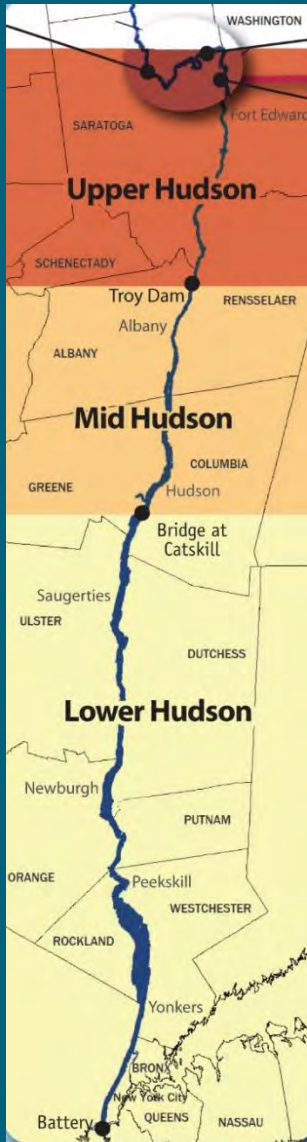
WARNING!

Fish and crabs from these waters contain chemicals and may be harmful to eat, especially for women and children.



Learn more! Call NYS Department of Health
518-402-7800
800-458-1158

Hudson River Advice for Men and Women above 50: Hudson Falls to Catskill



Upper Hudson
From the Rt. 9 Bridge to Troy Dam





Do not eat fish from the Route 9 Bridge to the Troy Dam.

From Baker's Falls to the Troy Dam, New York's State Department of Environmental Conservation's "catch and release" regulations apply.

Take No Fish. Eat No Fish.



















Mid Hudson
From Troy Dam to Bridge at Catskill

Eat up to one meal a month:

 Alewife	 Rock bass
 Blueback herring	 Yellow perch

Do not eat other fish from the Mid Hudson including striped bass

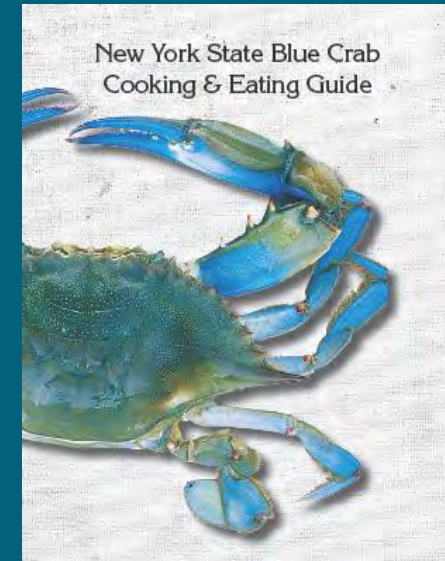
Hudson River Advice for Men and Women above 50: Catskill to NYC

<p style="text-align: center;">Lower Hudson From Rip Van Winkle Bridge at Catskill to the NYC Battery</p>	 Men over 15 and Women over 50	 Women under 50 and Children under 15
 Walleye  White catfish  Channel catfish  American eel*  Gizzard shad <i>*DEC regulations prohibit taking American eel for food from the Hudson River</i>	DON'T EAT	DON'T EAT
 Striped bass  Smallmouth bass  Largemouth bass  Bluefish  Brown bullhead  White perch  Carp  Rainbow smelt  Goldfish  Atlantic needlefish	Up to 1 meal/month	DON'T EAT
 Blue crab Do not eat the tomalley (green stuff, mustard) or reuse cooking water	Up to 6 crabs/week	DON'T EAT
All other species	Up to 4 meals/month	DON'T EAT

Hudson Fish Advisory Outreach

What Is the Advice: Crabs

- More common south of Kingston
- Very popular – people who catch them, eat them
- In NYC rivers, dioxin, PCBs and cadmium build up in the mustard/tomalley
- Crab mustard/tomalley consumption is common for a number of ethnic groups
- 80% of the PCBs move into the cooking water - discard cooking juices and don't use to make sauces or soups



Hudson Fish Advisory Outreach

What Is the Advice: Reducing Chemicals in a Meal



For men and women above 50 who eat Hudson fish

- PCBs build up in the fat and skin of fish
- Removing skin and fat and cooking so fat drips off can cut the PCBs in a meal nearly in half
- Many ethnic groups prefer to use the whole fish

NYSDOH Hudson Fish Advisory Outreach Program



Budget

- Total of \$4 million with a twenty year commitment that the program will continue through 2027
- Projected budget of somewhat higher spending in years closer to dredging period

Issued two Requests for Applications for “Minigrants” to establish partnerships with local groups who know about Hudson fish consumption in their community

- 2009 to 2013 – approximately \$60,000 per year in subcontracts to four community partners
- 2014 to present - \$ 90,000 in subcontracts to six community partners

Staff:

- 2009 to 2011 – 1 full time and 2011 to 2016 – 1.7 full time staff
- 2014 to 16 – part-time seasonal staff, some with Spanish and Chinese language skills

Current Funded Minigrant Partners

Six minigrant partners:

- Cornell Cooperative Extension (CCE) Dutchess
- CCE Rockland
- CCE Saratoga
- Arm of the Sea Theater (through October 2016)
- Rensselaer Land Trust
- Hudson Sloop Clearwater

Partners table at events and distribute materials, do presentations and classes at schools, do informal surveys on Hudson fish consumption, develop local materials and radio Public Service Announcements



Minigrant Partner Arm of the Sea Theater

- Arm of the Sea Theater developed “Hook Line and Sinker: Fishing the Hudson River”
- In 2015 the show reached over 3,000 people with project-funded performances



“PCB molecule” and its friend the catfish



Characters demonstrate removing the skin and fat, which reduces PCBs in a Hudson fish meal

Examples of Making Outreach Materials and Activities More Effective

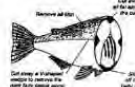
- Develop materials that are more visual, use pictures of fish, tables, maps
- Use positive messaging - what can you eat? Suggest local alternatives to Hudson fish
- Continue to develop strategies for lower literacy audiences and for people for whom English is a second language
- Create interactive learning exercises

Eating Sport Fish
2004-2005 Health Advice for the Capital District, Hudson River, New York Harbor, Fresh Waters of Long Island and Marine Waters of New York

Why is this fish important to eat?
Children eat food to grow up healthy and strong. Most of the food they eat is fish. Fish is one of the best sources of protein, such as some chicken or beef.

What is the fish important to eat?
Children eat food to grow up healthy and strong. Most of the food they eat is fish. Fish is one of the best sources of protein, such as some chicken or beef.

Which fish are safe to eat?
Children eat food to grow up healthy and strong. Most of the food they eat is fish. Fish is one of the best sources of protein, such as some chicken or beef.









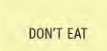







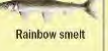



Hudson River between Bakers Falls (in Hudson Falls) and the Federal Dam at Troy:

General Health Advisory
For the waters listed below, the general health advice recommendation is:
• Younger of childbearing age and children under 15 should **EAT NO FISH** from the waters listed below.
• Other people should follow the recommendations provided for each water listed below and should eat no more than one meal per week of any fish species not listed.

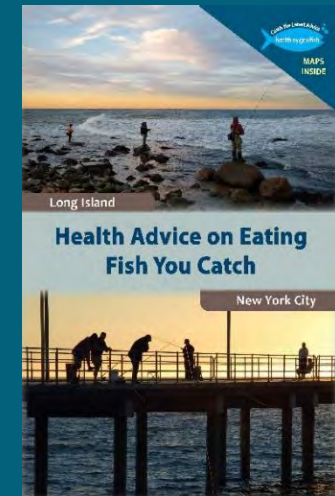
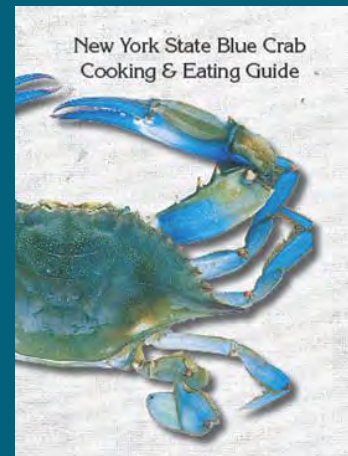
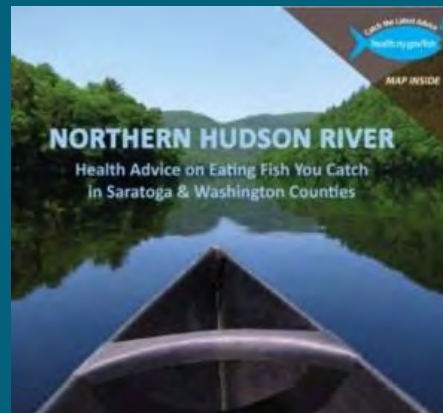
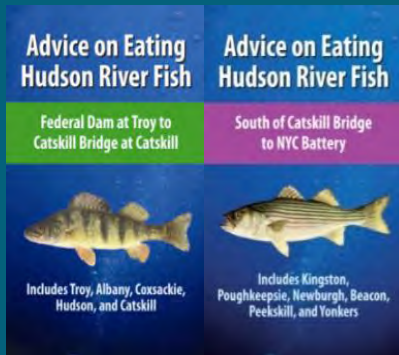
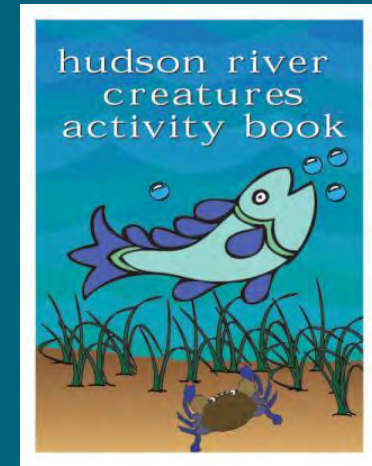
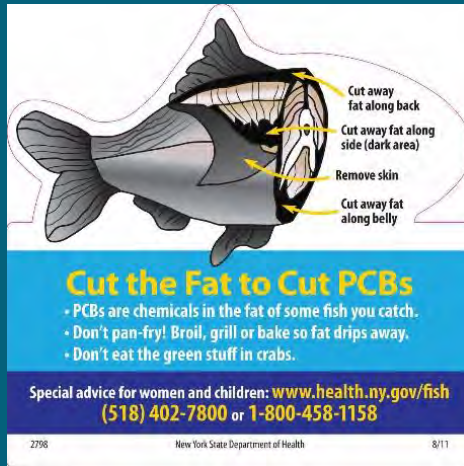
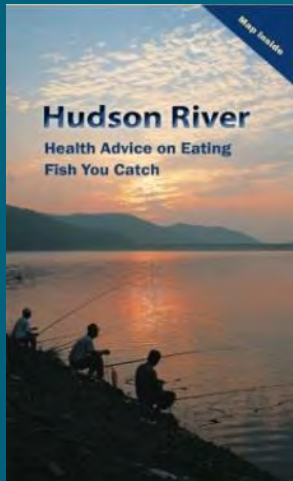
Hudson River
• Eat no more than one meal per month of American eel or white perch.
• Eat no more than one meal per month of American eel or white perch.

Other Waters of Long Island
• Eat no more than one meal per month of American eel or white perch.
• Eat no more than one meal per month of American eel or white perch.

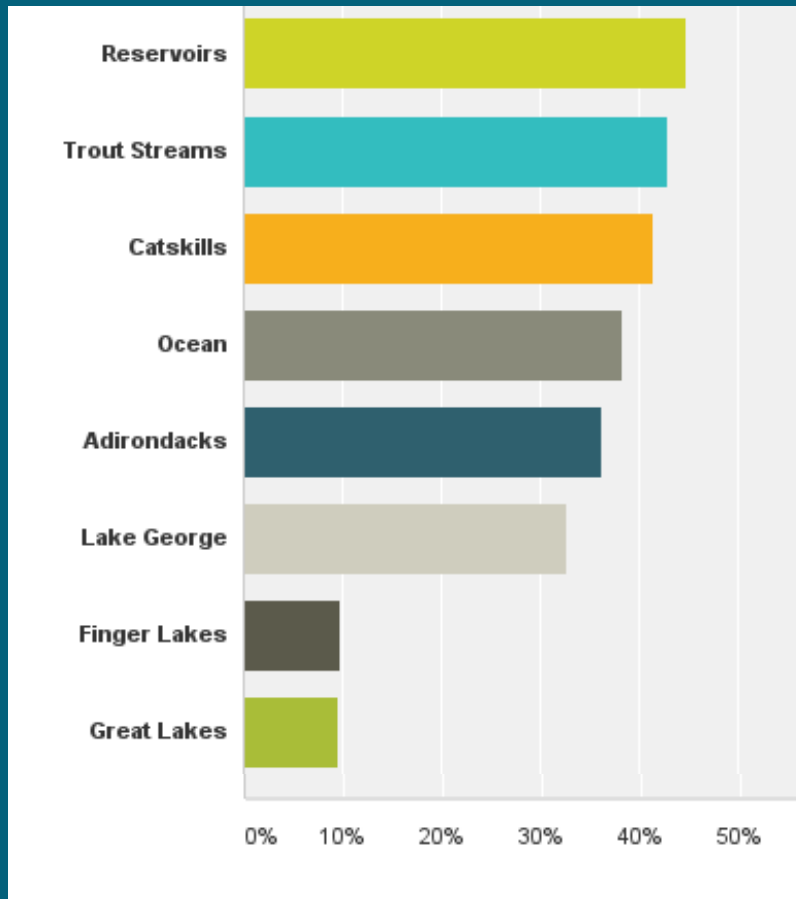


Lower Hudson From Rip Van Winkle Bridge at Catskill to the NYC Battery		 Men over 15 and Women over 50	 Women under 50 and Children under 15
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 Striped bass  Smallmouth bass  Largemouth bass  Bluefish  Brown bullhead  White perch  Carp  Rainbow smelt  Goldfish  Atlantic needlefish	Up to 1 meal/month	DON'T EAT	
 Blue crab Do not eat the tomalley (green stuff, mustard) or reuse cooking water All other species	Up to 6 crabs/week	DON'T EAT	
	Up to 4 meals/month	DON'T EAT	

Free Hudson River Fish Advisory Materials



Many People Who Fish the Hudson Fish River Also Fish in Other Water Bodies



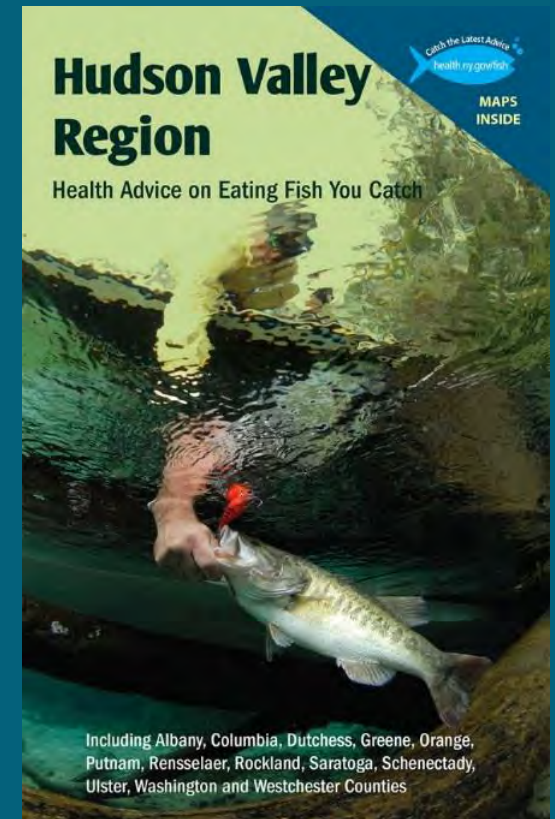
- NYSDOH does short convenience-sample surveys about Hudson fish consumption at events. We ask “Besides the Hudson, What Other Places in New York Do You Fish?”
- Many people who fish the Hudson also fish in other water bodies. We want to encourage families who want to eat fish to eat it from waters that are healthier choices.

Newest Brochure

- Positive messaging to encourage following the advice - suggest where a family can eat fish as healthier alternatives

2015 - Hudson Valley Region

- Has advice for all waters in 13 Hudson counties
- Also includes a list of waters with DEC access where the family can eat fish
- In English, Spanish and Chinese
- Over 4,000 distributed in 2016

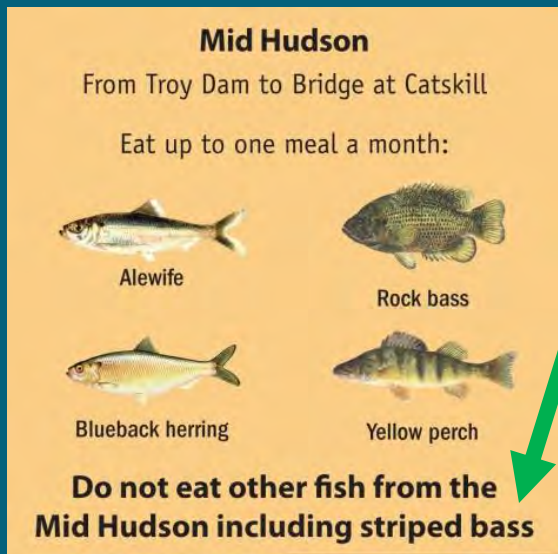


Collaboration on Educational Materials



Materials are distributed by outreach staff and migrant partners, community organizations, municipalities and other entities that sell fishing licenses

- Work with audiences and partners to refine materials
- Gil Hawkins of the Hudson River Fisherman's Association suggested "including striped bass" for the Hudson River brochure
- Asian Community Unity Society representative suggested we use pictures of fish with names in English
- New York State Department of Environmental Conservation (NYSDEC) summarizes NYS advice in freshwater fishing regulations guide



Hudson River Fish Advisory Signs



- NYSDOH developed signs with focus groups that has a stronger message for Catskill to Troy
- Signs are in English, Spanish, and Chinese
- Posting signs is voluntary on the part of property owners
- Signs require maintenance – are frequently damaged or removed
- In 2013, NYSDOH began annual inspections of riverfront fishing access south of Troy
- Followed up by letter and phone with property owners
- Mailed out over 400 signs for posting at about 90 locations in 10 counties
- Since 2015, of 33 property owners, 24 agreed to 113 new signs

WARNING!

Fish and crabs from these waters contain chemicals and may be harmful to eat, especially for women and children.



Learn more!

Call NYS Department of Health
518-402-7800
800-458-1158

NOTICE!

Some fish and crabs from these waters may be harmful to eat.



Learn more!

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Outreach Venues and Partners



To reach people who fish and their families, DOH staff do presentations and table at a range of events - 20+ field days each year (58 in 2015)

- County fairs
- Community and ethnic festivals
- Fishing and hunting shows
- Fishing organizations
- Boating associations
- Neighborhood associations
- Headstart and WIC clinics

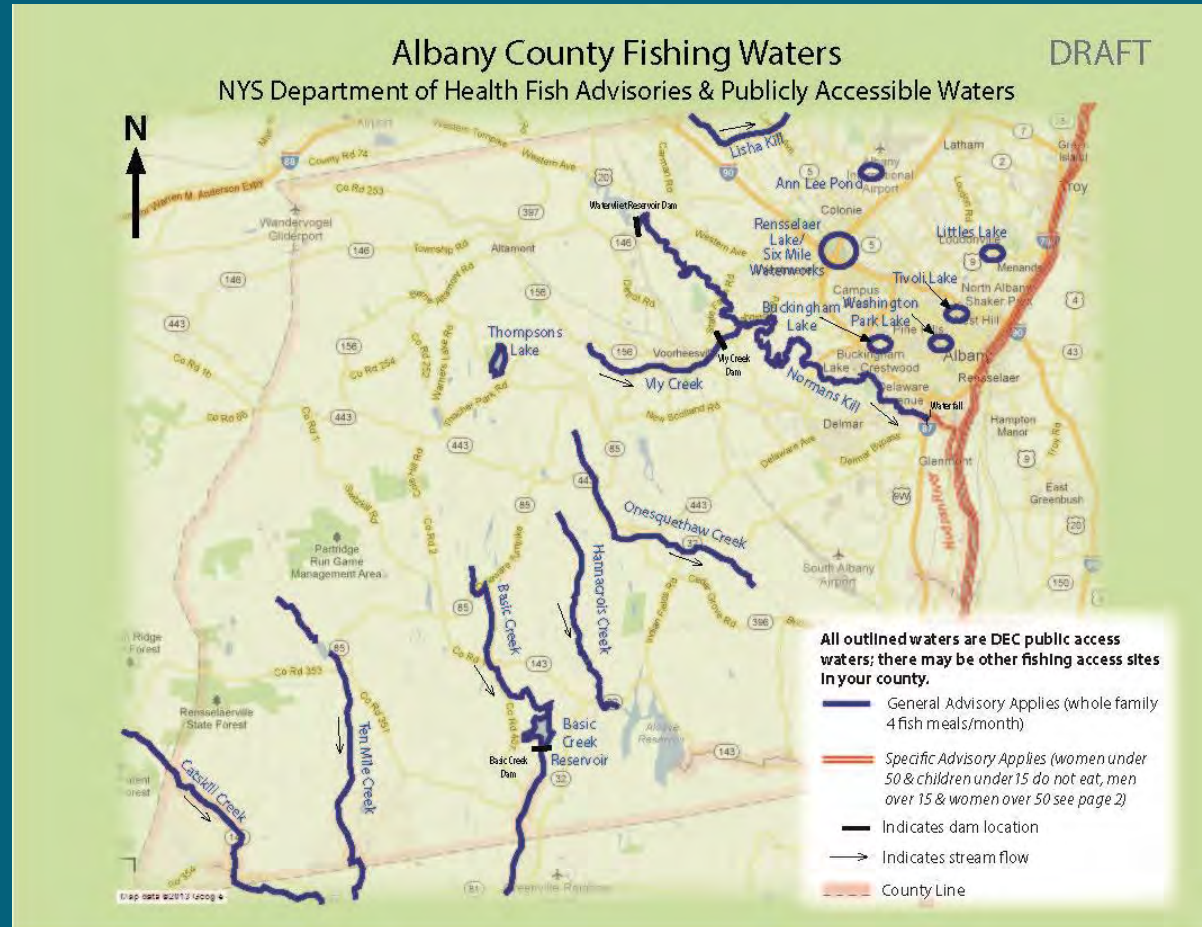


Network with local organizations at events

We have been in all 13 counties of the project area and most major cities, but focus heavily on the Capital District as fish there are most highly contaminated that can be legally eaten

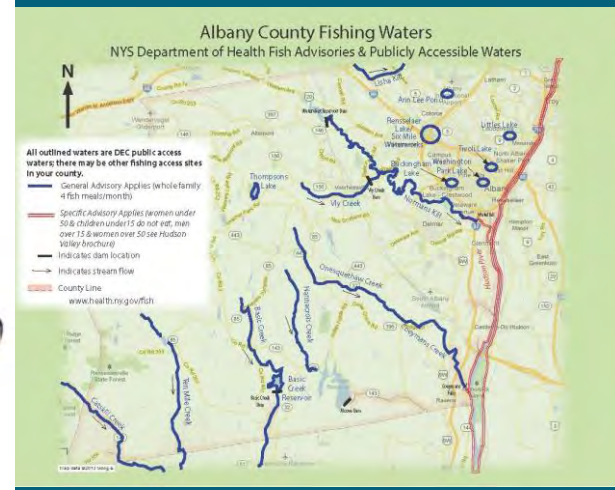
Maps Help People Make Better Choices

- Women and children should not eat fish from the Hudson
- For many Hudson counties, the whole family can eat fish up to four times a month from many other local waters (blue waters)
- Hope to get maps online in 2017





Interactive "Go Fish" Game for Tabling



Hudson Valley Go Fish Quick ID Sheet



Can you keep your fish or should you throw it back?

Red Waters
Families should avoid eating fish from waters in red.
Throw it back!

Blue Waters
Fish from blue waters are a good choice for the whole family. You can keep your fish!

Children take home a paper fish from the good (blue) waters

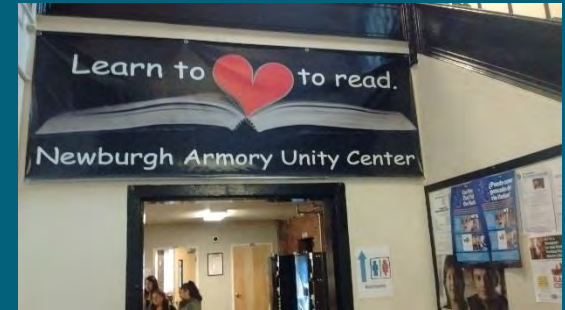
Outreach to Immigrants



- Often are less aware of contamination
- Need to rely on community partners to identify and connect
- Cultural practices – may eat whole fish, fatty species like catfish, make fish paste, eat crab tomalley (mustard)
- Some newcomers eat substantially more local fish - in a NYSDOH study in Buffalo, people from Burma ate five times (102 locally-caught fish meals per year) as much fish as licensed anglers ate

Outreach to Immigrants

- Language and literacy barriers - develop and use different strategies
- Have partnered with organizations who work with agricultural and other immigrant workers
- In 2016 we focused on Newburgh, where we are lucky to work with Latinos Unidos of the Hudson Valley
- CCE Rockland is partnering with the Rockland Immigration Coalition
- Made connections with the Spanish speaking community in Dutchess County for spring 2017
- Are collaborating with “Refugee Roundtable” volunteers who are connected to the refugee community in Albany to reach out through churches



Karen Community “Photovoice” Project

- In 2015, NYSDOH and Karen youth participated in a project in which the youth took pictures of “Our Healthy Foods from Around the World at Home”.
- The Tomhannock reservoir is a water body in Rensselaer County where families can eat fish up to four times a month.

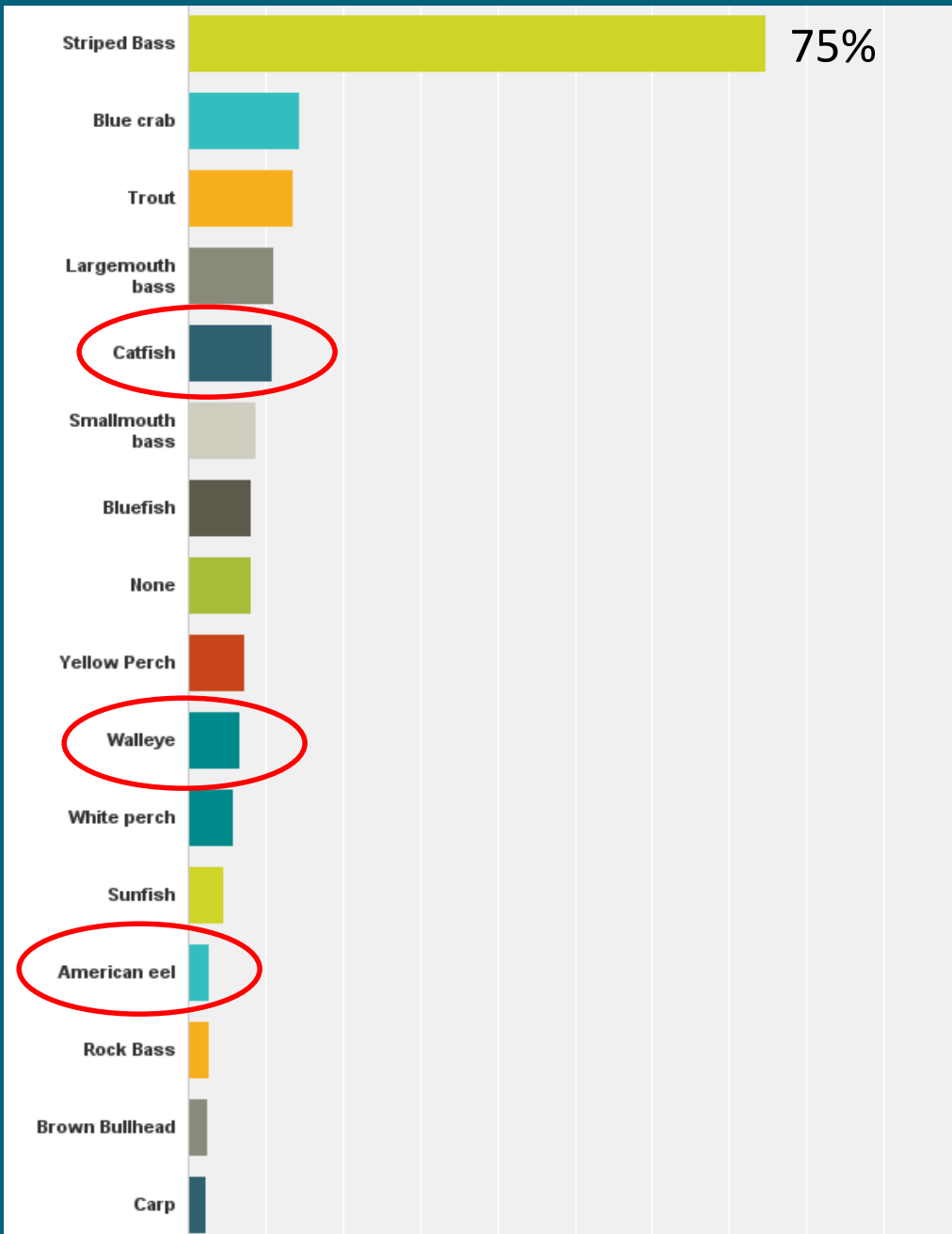


Food in the Water. Food in the Pot:
Fish is good. This dish has fish, olives, turmeric and paprika. The Karen men caught the fish in the Tomhannock Reservoir. (Saw Shi)



Single Fish:
My cousin and I went fishing on the Tomhannock Reservoir and he caught this fish. We ate it for dinner. My mom fried it in a pan. (Lay Doh Say)

NYSDOH Hudson Fish Consumption (460)



What fish do you most frequently eat from the Hudson? (all that apply)

NYSDOH advises on one should eat Hudson catfish, (as of 2016) walleye and eel

Many people feel striped bass are “ocean fish” and do not know, or do not agree, that they should not eat them from Troy to Catskill

There are no alternative local waters for striped bass, as there is for catfish and walleye

Increasing Understanding about Contamination in Striped Bass to Encourage Following the Advice



Can you eat that fish from the Hudson?

The Hudson River has many sought after fish, but none as coveted as the mighty striped bass. Striped bass are long-lived fish that can reach lengths of greater than 45 inches and are prized by anglers for their feisty nature and delicious taste.

Most anglers know that striped bass spend part of their time at sea and part of their time in tidal tributaries like the Hudson River. But many anglers are not aware that the New York State Department of Health (NYSDOH) advisory for Hudson River fish includes striped bass.

Striped bass migrate but still accumulate PCBs (polychlorinated biphenyls). The NY State Department of Environmental Conservation samples many striped bass from Troy to the GW Bridge (NYC) every year to monitor PCB levels in fish. While many striped bass have low levels of PCBs, some have levels higher than the FDA marketplace standard of 2 ppm.

Fish caught between the Federal Dam at Troy and the Rip Van Winkle Bridge at Catskill are more likely to contain high levels of PCBs than fish caught south of Catskill. New tagging studies (David Secor, University of Maryland) show some striped bass stay in the River longer than previously thought, allowing more time for PCBs to build up. Follow up studies are planned.

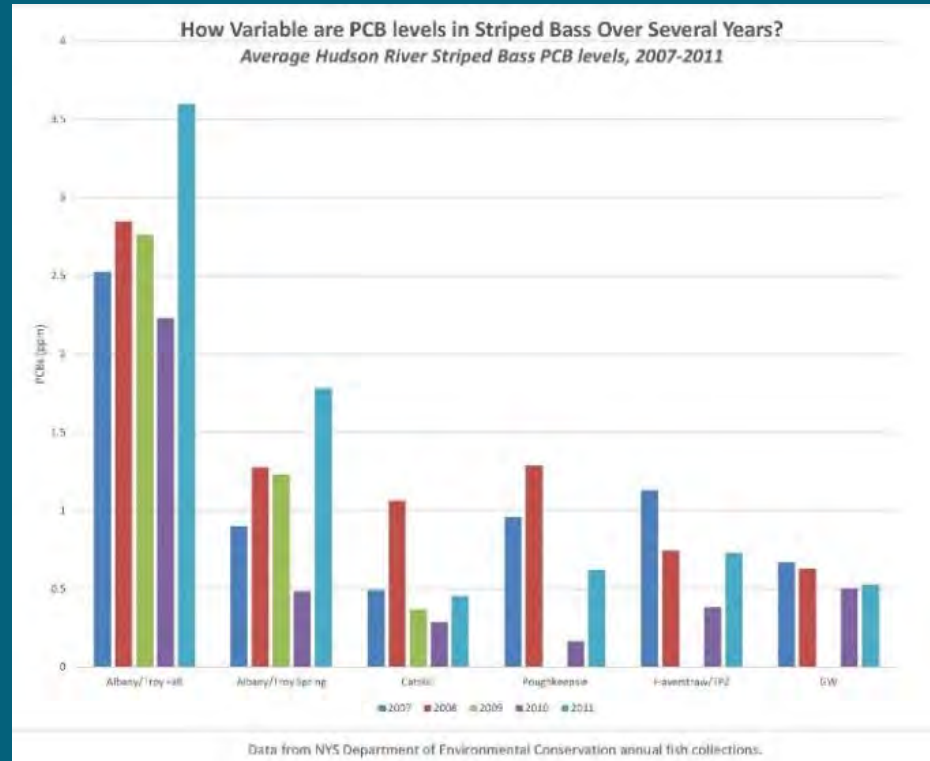
Striped bass are by far the most popular fish consumed from the Hudson River. When surveyed, nearly 50% of anglers say they eat striped bass from the River at least a few times a year. We urge all anglers and their families to know and follow the advice for striped bass:

Between the Federal Dam at Troy and the Rip Van Winkle Bridge at Catskill:
Everyone - don't eat striped bass, practice catch & release fishing.

Between the Rip Van Winkle Bridge at Catskill and the NYC Battery:
Men over 15 and Women over 50 - eat up to 1 meal/month of striped bass.

Women under 50 and children under 15 - don't eat, practice catch & release fishing.

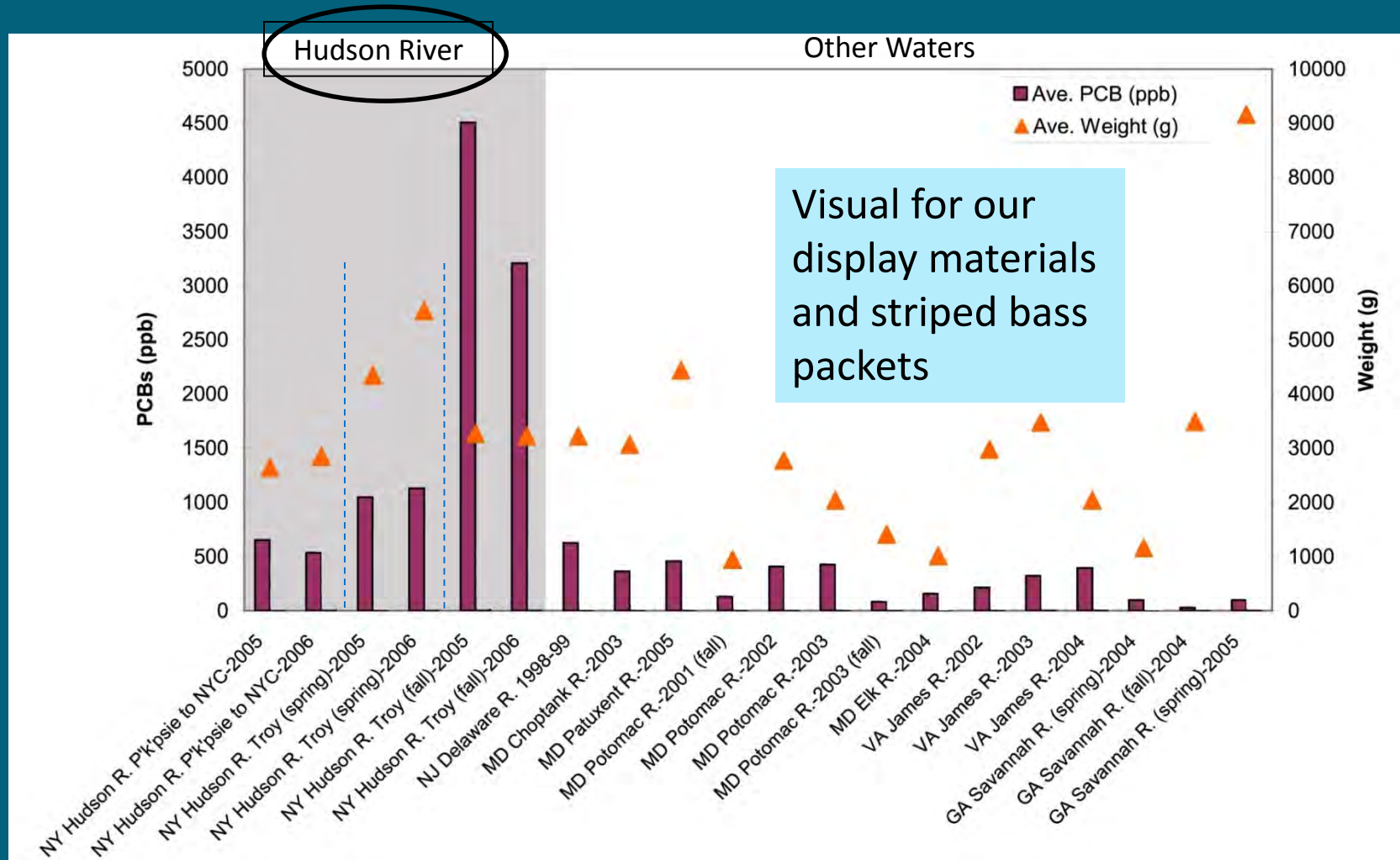
This packet contains more information specifically about striped bass - included are graphs of striped bass PCB levels, summary slides of new research being done on striped bass tagging and migration studies, and an age to length chart.



In 2016 we began to provide information packets about Hudson striped bass PCB contamination and migration to people interested in knowing more

PCBs in Striped Bass

In the Hudson River vs. other East Coast Rivers



Report of the Interstate Workgroup on Evaluating Atlantic Coastal Advisories for Recreationally Caught Striped Bass and Bluefish based on PCBs – 10/1/2008

NYSDOH and Hudson River Fish Advisory Minigrant Partner Surveys

NYSDOH and partner surveys meet two important outreach goals:

- Education - local fish eaters receive fish advisory materials after survey
- Information collected helps our program target resources



NYSDOH and Hudson River Fish Advisory Minigrant Partner Surveys

Survey limitations:

- All are self-report
- CCE surveys are collected at a variety of community locations, but respondents are not selected to statistically represent Hudson Valley residents
- NYSDOH surveys reflect the people at the events we attend
- Surveys reflect bias of who chooses to participate

NYSDOH and Hudson River Fish Advisory Minigrant Partner Surveys

Survey limitations continued:

- Surveys are very short to encourage participation
 - we do not collect information on how much of each species is consumed or how each type of fish is prepared
- People do not answer every question and in upcoming slides we present results for the number of people who answered the question, may be slightly different from the total responses

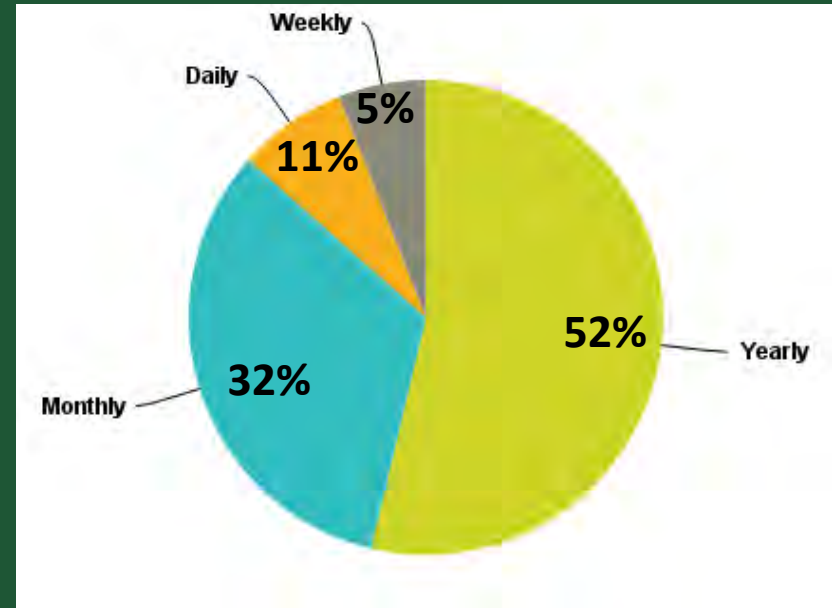
CCE Dutchess Partners

Local Fish Consumption Surveys

- Since 2012, CCE Dutchess has coordinated local fish consumption surveys from Dutchess, Columbia, Greene, Orange and Ulster counties
- Surveys are collected at food banks, low income daycare centers, clinics, and other sites used to recruit nutrition program clients
- 75% of respondents are women and 72% are under 55
- 23% black, 23% Hispanic/Latino

CCE Dutchess Partners Local Fish Consumers

- 1338 surveys
- 17% report they ate fish or crabs they or someone they knew caught from a local water (232)
- Over half of local fish eaters ate fish or crabs from the Hudson – about 10% of all respondents (136)
- 46% of Hudson fish consumers were aware of the advice



How Often Do You Eat
Locally Caught Fish?

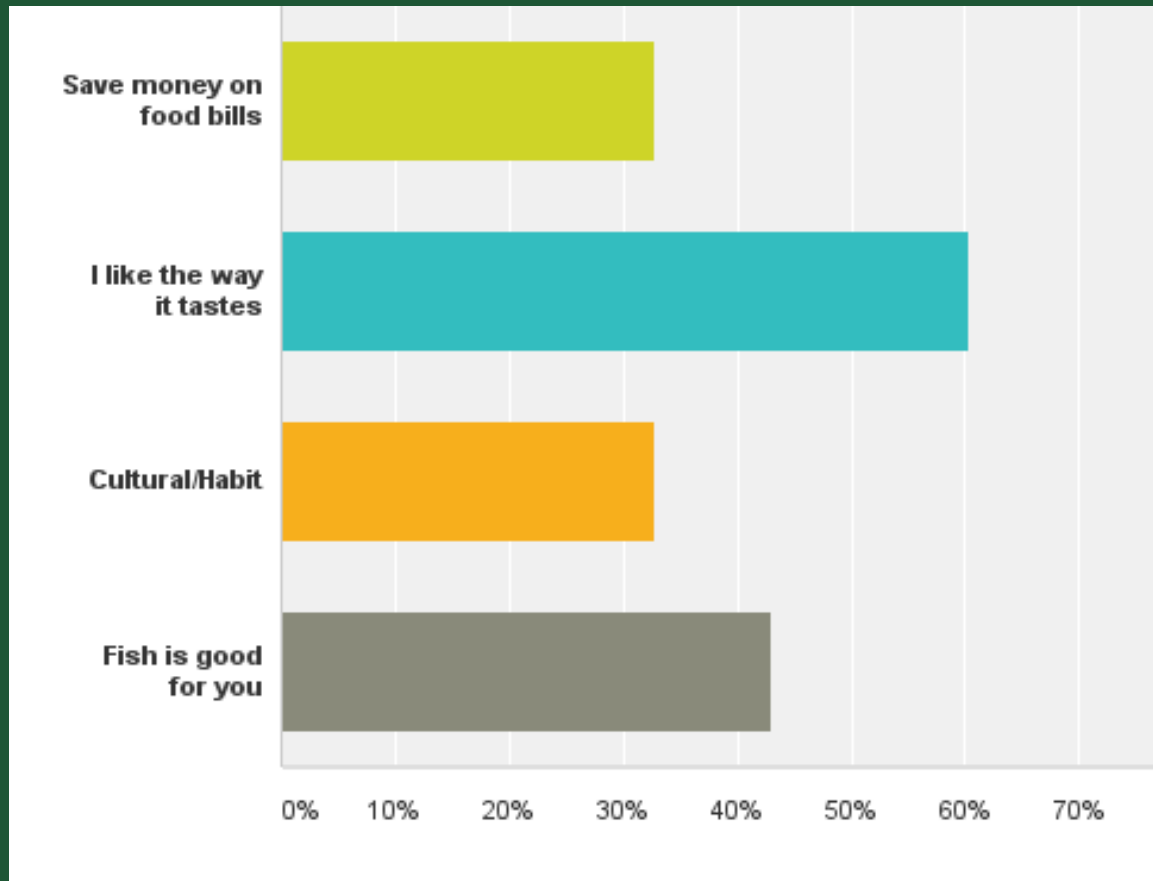
CCE Dutchess Partners Hudson Fish Consumers

Number	Eating Hudson Fish	Eating Hudson Crabs	Eating Hudson Fish or Crabs
Respondents	72	64	136
Women under 55	29	20	49

1338 surveys

- 29 respondents reported their children under 15 ate Hudson fish

CCE Dutchess Partners Hudson Fish Consumers



Responses from people eating Hudson fish to “What are the best reasons for eating fish or crabs that you catch? (check all that apply)”

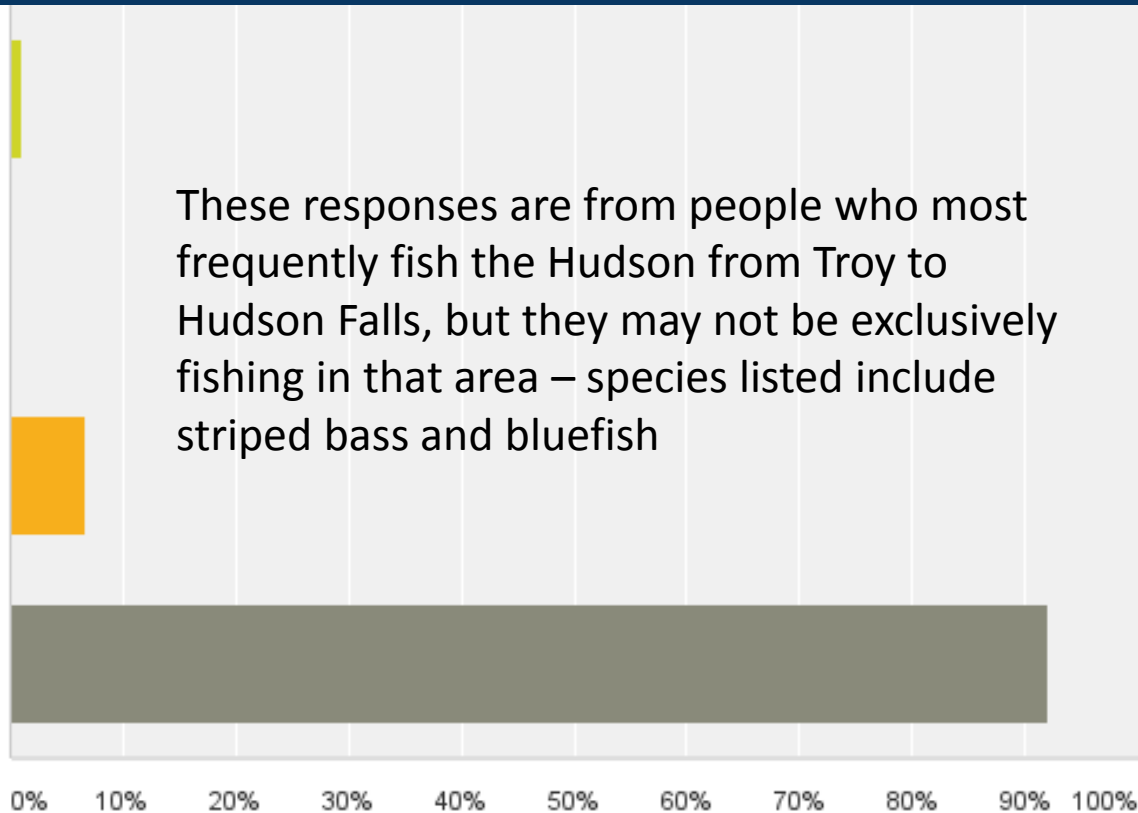
CCE Saratoga Partner Hudson Fish Consumption Troy to Hudson Falls

A couple times
per week

A couple times
per month

A couple times
per year

Never



These responses are from people who most frequently fish the Hudson from Troy to Hudson Falls, but they may not be exclusively fishing in that area – species listed include striped bass and bluefish



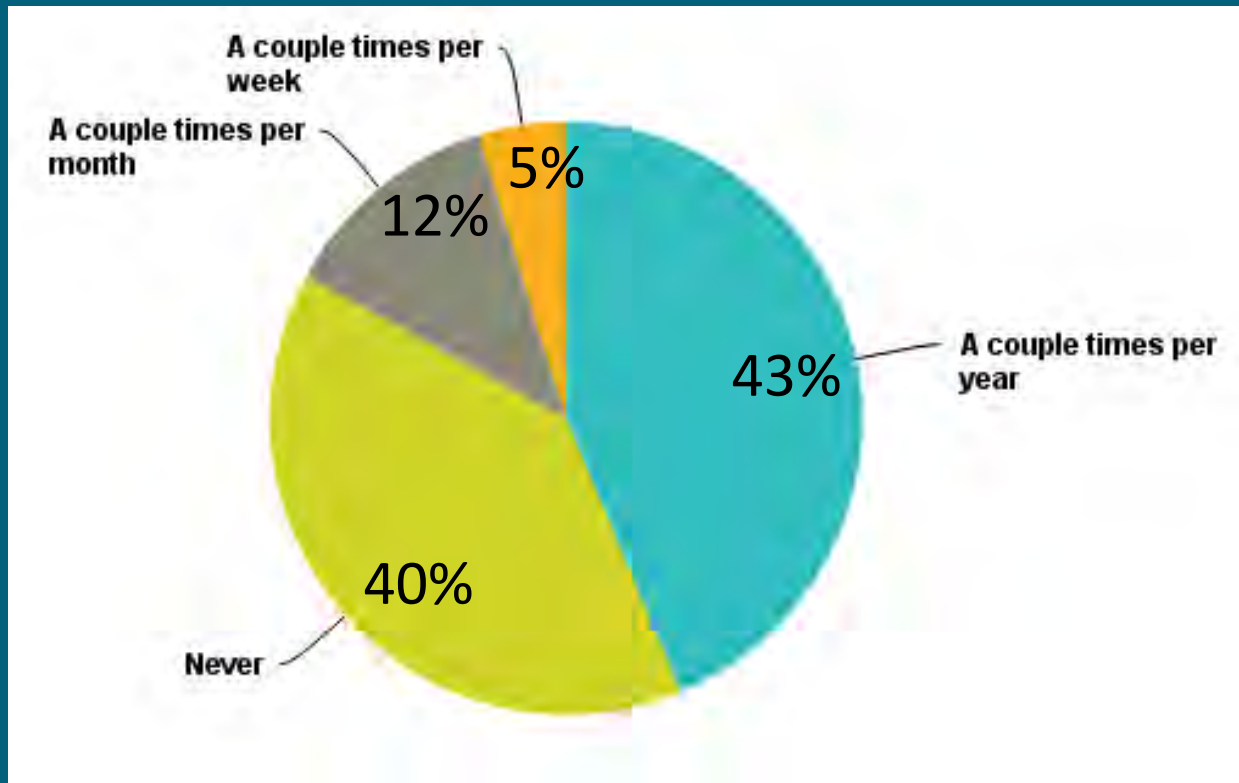
How often
do you eat
Hudson
fish?
(107)

NYSDOH Hudson Fish Consumption Survey



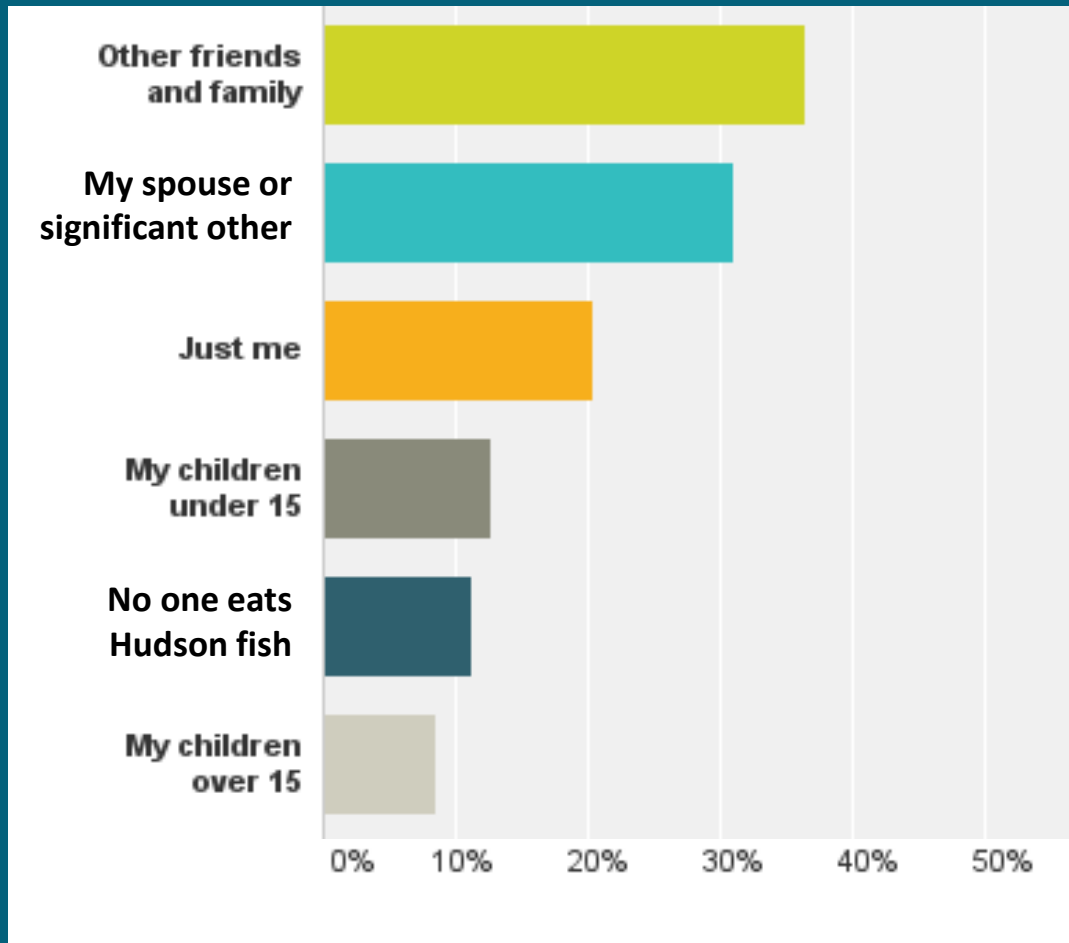
- 786 “convenience” samples – one page surveys done since 2013 at outreach events NYSDOH staff attend in the Hudson Valley from Saratoga to NYC
- All respondents fish on the Hudson River
- 85% male, 82% white, 7% African American, 6% Hispanic/Latino, 42% over 50
- 50% fish most frequently from Catskill to the Tappan Zee
- About 460 report they ate Hudson fish and 168 ate crabs

NYSDOH How Often Do You Eat Hudson Fish (All 786 Respondents)



40% of respondents say they practice catch and release

NYSDOH Who Else Eats Hudson Fish? (460 Hudson Fish Consumers)

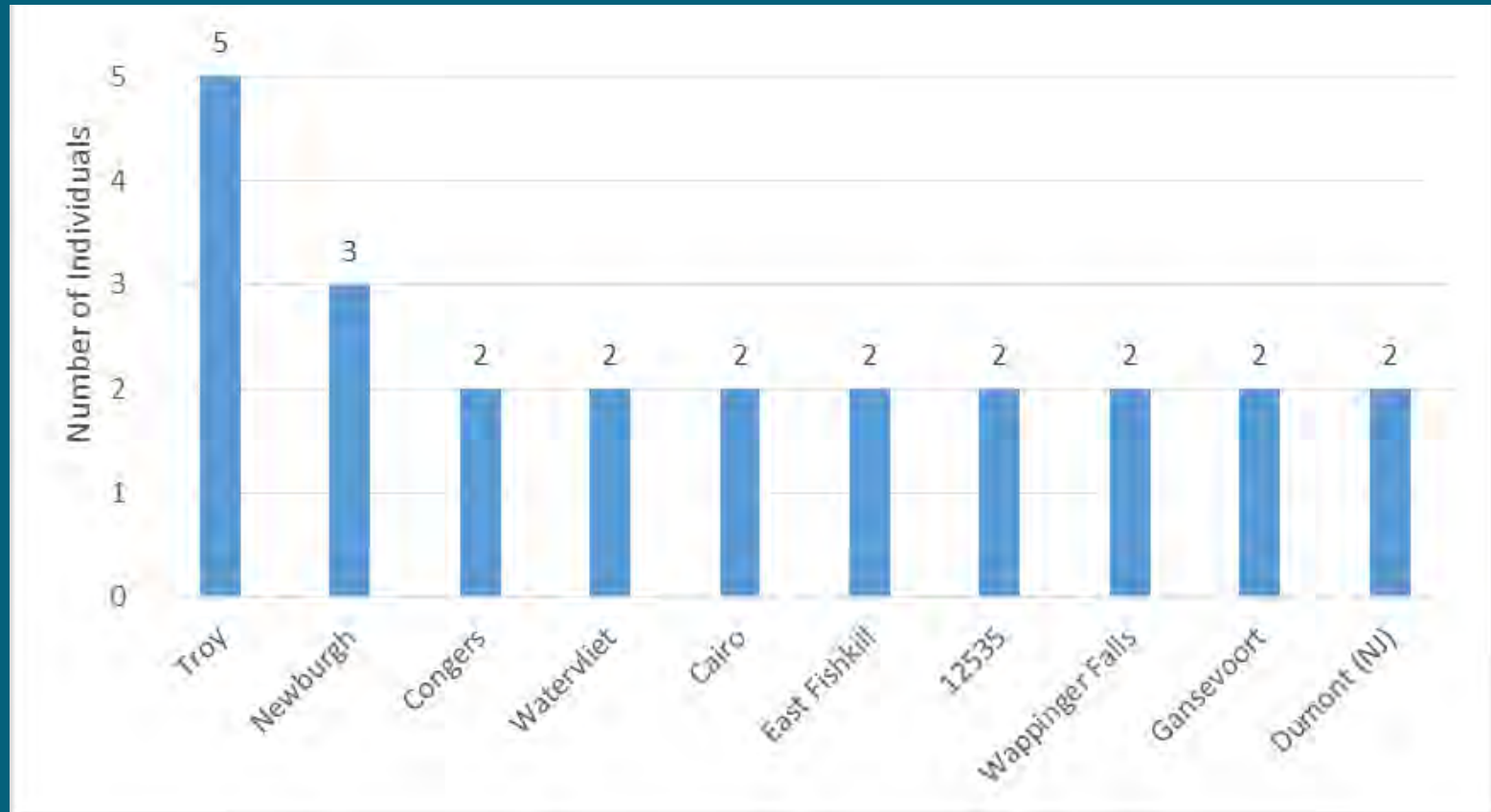


Sharing is common

Sharing with children under 15 is a concern (58)

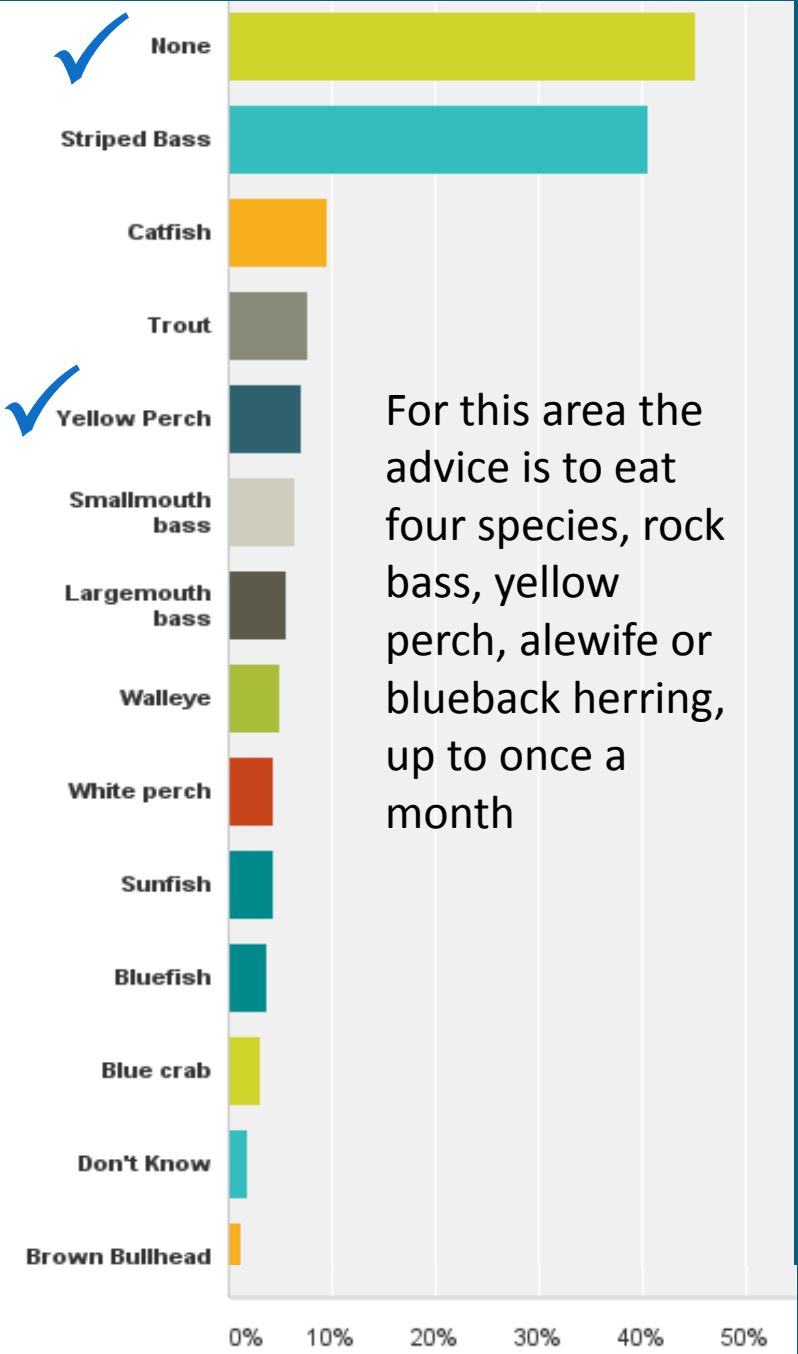
24 women under 50 reported eating Hudson fish

NYSDOH: 10 Locations With Women under 50 Eating Hudson Fish or Crabs (Residence Zip Code) (24)



Fish Consumed Troy to Catskill (186)

- Most fish consumption from Troy to Catskill is not consistent with the NYSDOH advice



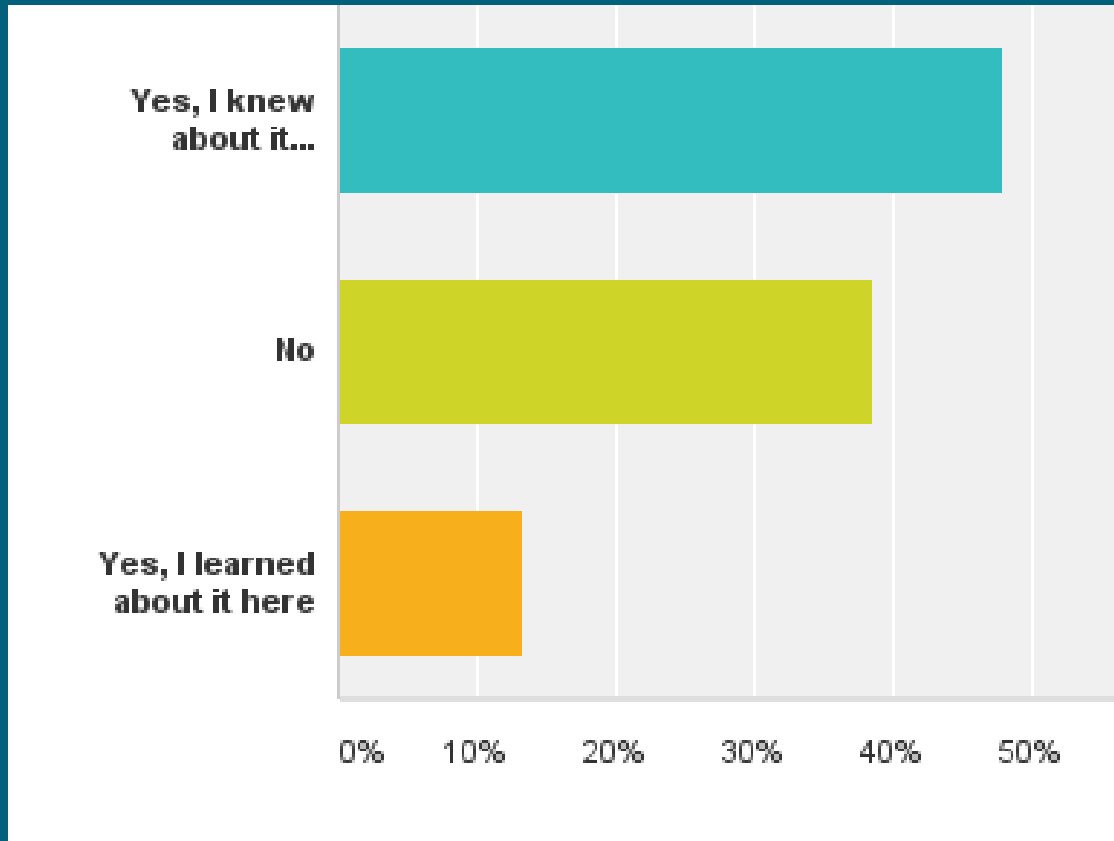
Mid Hudson
From Troy Dam to Bridge at Catskill

Eat up to one meal a month:

 Alewife	 Rock bass
 Blueback herring	 Yellow perch

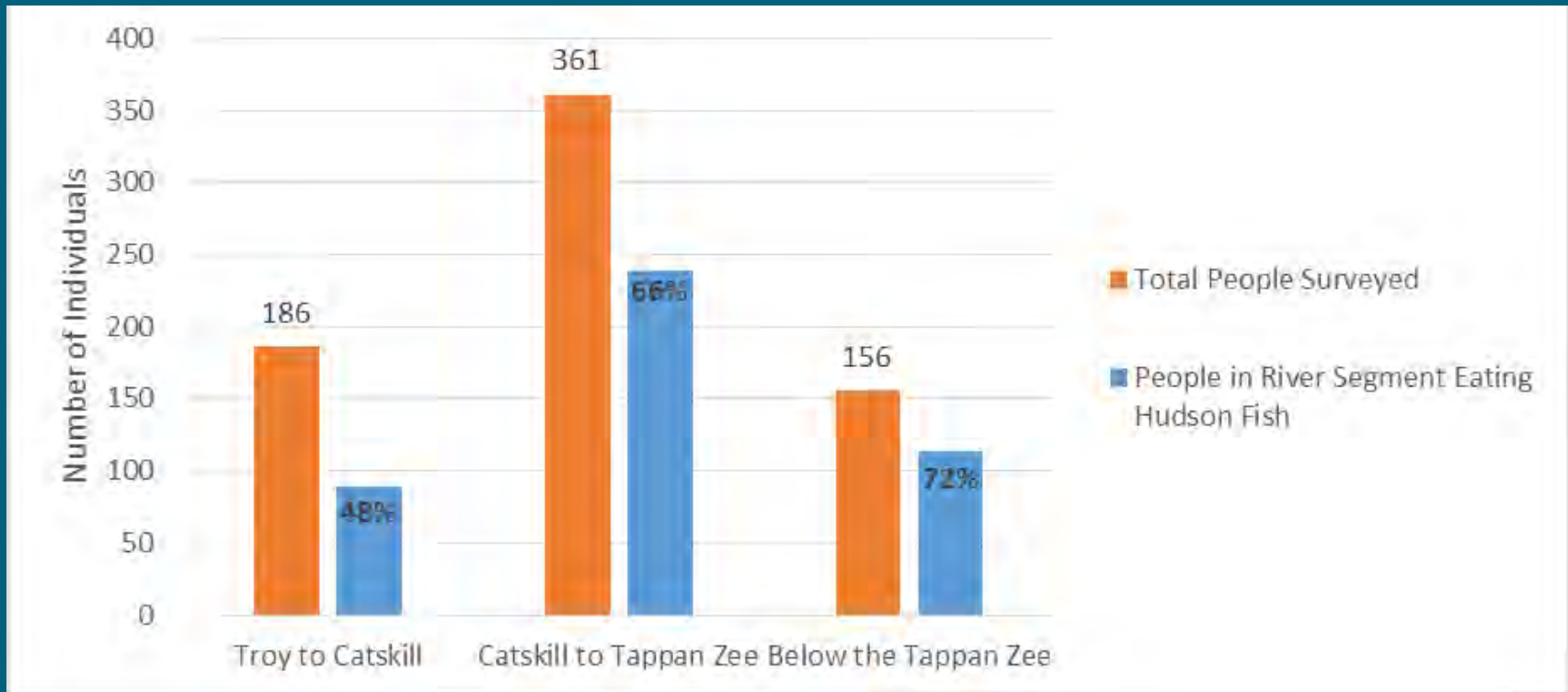
Do not eat other fish from the Mid Hudson including striped bass

NYSDOH Awareness of Advice (460 Hudson Fish Consumers)



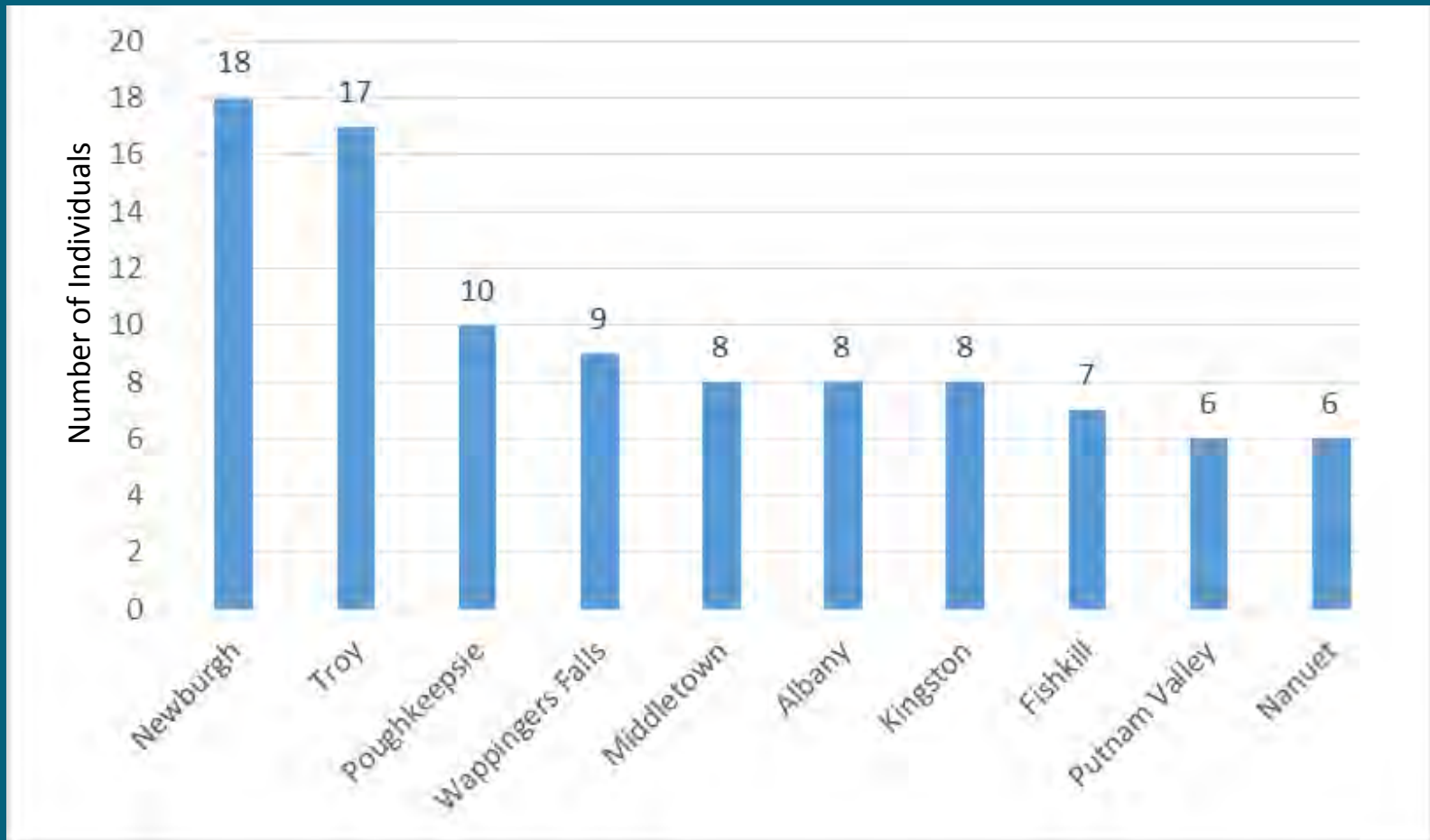
Many Hudson fish consumers report they do not know the advice

NYSDOH Percentage of People Eating Hudson Fish Varies Along the River



Fewer people report eating Hudson fish from Troy to Catskill

NYSDOH: 10 Locations With Largest Number of People Eating Hudson Fish or Crabs (Residence Zip Code)



NYSDOH Follow-up: What Do You Remember from Reading Materials or Talking to NYSDOH?

Response (all that apply) – I remember	Percentage (N=24)
PCBs stay in the fat and skin of fish	70%
Striped bass have chemicals like other fish in the Hudson	48%
Making a fillet and baking or grilling fish can cut down PCBs in a fish meal	43%
The NYSDOH advice around Albany and Troy is to not eat most fish	30%
The graph with PCB levels in striped bass	22%

Response (all that apply)	Percentage (N=24)
No one	8%
My family	54%
A friend	21%
More than one friend	54%

Who Did You Share the Information With?

Moving Forward

- Invite partners who connect with the Hudson fishing community to join us!
- Reinforce that contamination levels in fish will take a long time to drop after the dredging
- Reinforce the advice for the Capital District and that the advice applies to striped bass
- Create more connections to immigrant communities and use ethnic media to promote the advice
- Seek more information on minority community consumption
- Try to learn more about Hudson fish consumption in NYC



For more information:

www.health.ny.gov/hudsonriverfish

http://www.health.ny.gov/environmental/outdoors/fish/hudson_river/advisory_outreach_project/hrfa@health.ny.gov or regina.keenan@health.ny.gov or 518-402-7530