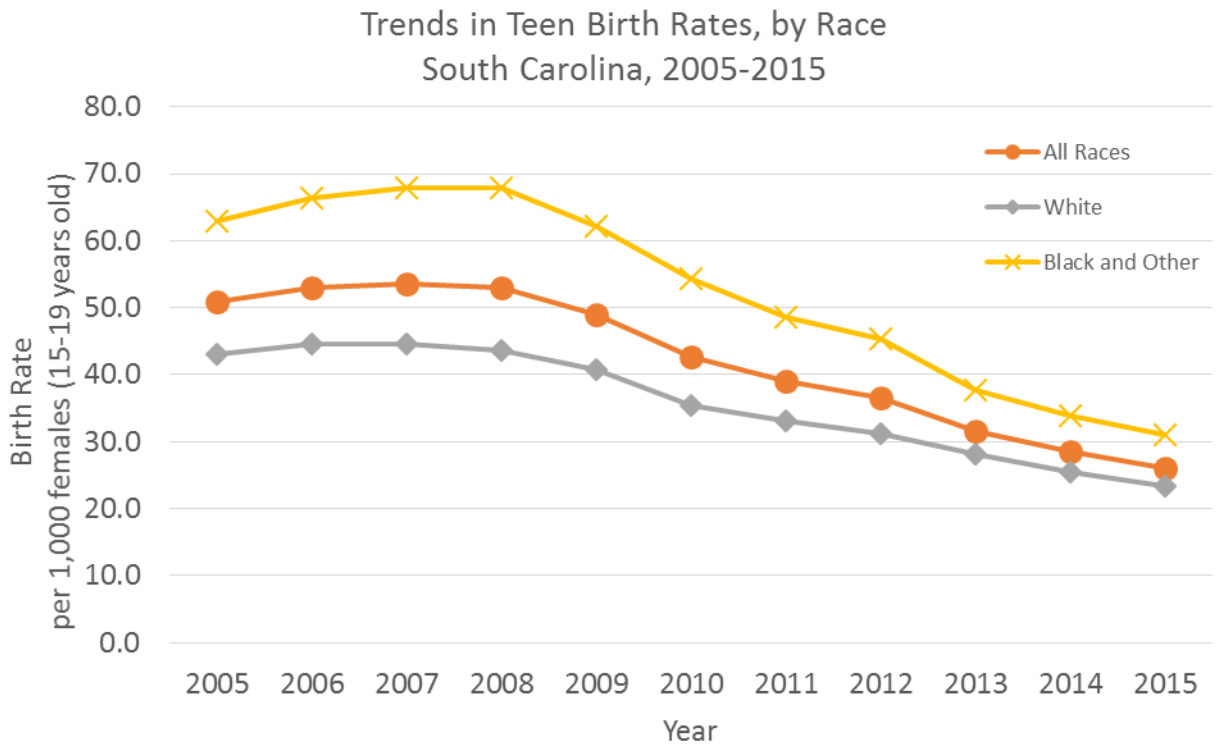
Legislative Oversight Study of the Department of Health and Environmental Control: Department's Response to Follow-Up Questions

Teen Pregnancy Rates

Total teen birth rates in the State of South Carolina decreased from a high of 50.9 per 1,000 teen women in 2005 to a low of 26.1 per 1,000 teen women in 2015, a reduction of almost half during this time period (see table below). Near equal reductions in teen births occurred among white teen women and women of minority race; however, disparities persisted in 2015 among minority races, with teen birth rates more than 1.3 times higher than that among their white counterparts.



Managed Care Medicaid

DHEC assists uninsured patients who are infected with HIV and patients with hemophilia to access health insurance through South Carolina's insurance exchange. This was an important measure to help DHEC address increasing costs that exceeded DHEC's funding allocations. Without the SC insurance exchange, those patients would become uninsured and the state would need to cover the full costs of the uninsured patients' medication.

The estimated annual cost to the state for uninsured clients currently insured through the Affordable Care Act (ACA) would be:

- 1,633 ACA patients infected with HIV: $19,596,000 per year
- eight (8) uninsured patients with hemophilia: $1,646,819 per year

The state would then have to determine how to best cover these costs.

Challenges Related to Stormwater and Water Infrastructure

DHEC regulates stormwater discharges from new construction activities, including requirements for new development projects to control the rate at which they release water to the environment. In addition, cities and counties in urbanized areas are required to implement stormwater programs to address water quality from discharges to the environment through their storm sewer systems. These programs must include provisions for public education and outreach, detection of illicit discharges into their storm sewer systems, and addressing stormwater runoff from new and re-development.

Regarding stormwater challenges at the local level, the department has not conducted a formal needs assessment survey of local governments. However, as examples, the following needs have been identified by local governments and shared with the department:

- Richland County has identified the need for $19.5 million to complete more than 100 capital improvement projects for stormwater infrastructure, water quality improvement, and floodplain management activities.
- The City of Columbia recently identified stormwater infrastructure needs in excess of $93 million.
- A number of local governments have recently requested funding through FEMA's Hazard Mitigation Grant Program to fund 10 projects totaling in excess of $19 million for stormwater infrastructure and flood mitigation improvements.

In regard to water infrastructure across the state, DHEC's role is to make sure infrastructure is properly designed, constructed and maintained in accordance with the appropriate regulations. For drinking water and wastewater, we also have a role in funding water infrastructure improvements through the Clean Water Act and Safe Drinking Water Act State Revolving Funds.

State regulations require DHEC to implement the Clean Water Act and Safe Drinking Water Act programs. The department has historically found that small, rural water and wastewater systems have struggled the most to comply with these regulations. One reason for this struggle is that a smaller customer base typically results in less income for the system to hire full-time staff to properly maintain the water system infrastructure and conduct routine operations designed to prolong the life of the infrastructure. Additionally, small leaks often go undetected due to a lack of a comprehensive leak detection program, and can also increase expenses for the system. These smaller, rural systems also will likely not have full-time staff actively pursuing available funding to improve water system infrastructure. Finally, municipal water systems often rely on revenue from the water system to fund other town functions, which can result in some towns not maintaining sufficient funds to replace aging infrastructure.

To address these challenges and help small, rural water systems better comply with state and federal regulations, DHEC established the Office of Rural Water in March 2016. The office is currently working on the following issues:

- lead in drinking water;
- water system partnerships;
- technical assistance;
- funding opportunities for rural communities;
- environmental justice (EJ); and
- community engagement.

At the federal level, EPA contractors work with states to estimate the Clean Water capital investment necessary for publicly-owned treatment works (POTWs) to address the water quality objectives of the Clean Water Act. Similarly, EPA contractors work with states to estimate the Drinking Water capital investment necessary for public water systems to address the requirements of the Safe Drinking Water Act and to continue to provide safe drinking water to their customers. Both of these needs survey are based on a 20-year planning horizon. The estimated total Clean Water investment needs for SC are $566 million, as determined in 2008. (*Note: $29 million of the aforementioned total is for stormwater management*.) The estimated Drinking Water investment needs for SC are $1.8 billion based on the needs survey completed in 2016. (*Note: the latest Drinking Water needs survey results have not been officially published by EPA*.)

South Carolina Adopt-a-Stream Program

Citizen monitoring is an effective way to engage the public in the protection and stewardship of our water resources. Recently, DHEC partnered with Clemson University's Center for Watershed Excellence to develop the South Carolina Adopt-a-Stream program to coordinate and engage citizen monitors across the state. In preparation for the launch of this new initiative, we worked with Clemson to develop a new website (www.scadoptastream.org), create a new database, and conduct training webinars for program participants.

Below is a list of groups that have signed on to participate in the new Adopt-a-Stream program. We are actively seeking additional community partners (*e.g.*, we have reached out to the Friends of the Edisto to get involved in the initiative).

Group	**Associated Waterbodies**
AAAS Stream Stompers	Hollow Creek 1, Hollow Creek 2, South Edisto River (2 sites), Pond Branch
Anderson University	Coxs Creek, Rocky River (2 sites)
Arkwright Fairforest Creek	Fairforest Creek
Army Corps of Engineers @ Thurmond Lake	Clarks Hill Park Rec Area
Button	Big Shoally Creek
Camp Discovery	Hood Branch

Group	Associated Waterbodies
Carolina Blue	Boiling Spring
chseagles	Tibutary to Cudd Creek
Clemson Stream team	Botanical Garden
ClifCon#3	Pacolet River
Crain K&G	Eastatoe River
Creek Chimps	Unnamed Trib to Stevens Creek
Cupboard Creek Farm	Cupboard Creek
CU-SWU Joint AAS Project	Hunnicutt Creek (5 sites), Beaver Dam Creek
Denise and Andy	Stamp Creek
Dent Middle School	Little Jackson Creek/Carys Lake
DHEC SB	Smith Branch
Dillard Creek Duo	Dillard Creek
Enoree River Water Watchers	Enoree River
Fahr	Maple Creek, Unnamed Enoree River Tributary
fbk5	Reedy River
Fox Creek	Fox Creek
Friends of Jocassee	Thompson
GCWA	Cary Lake
GCWA2	Gills Creek/Forest Lake
GHS Citizen Science Club	Reedy River (3 sites), Richland Creek
Gills Creek Watershed Association	Pen Branch, Eightmile Branch
Greenville Tech Barton campus	Reedy River
Kim Brewitt	Fairforest Creek Tributary, Duncan Park Lane Tributary, Lawsons Fork Above Dam
Lake Conestee Nature Park/Reedy River	Reedy River
Lake Cunningham S.C. Team	Cunningham, Clear, Sliding Rock Creek
Lever	South Tyger River
Melissa Storm	Kelsey Creek
NGU STEW: a sustainability club	Meadow Fork Creek
Piedmont Audubon	unnamed (Hillview Stream)
Price	Overland Stream - unnamed
Richland County Stormwater Management	Cumbess Creek
Richland SWCD	CJDS Creek, Little Run at Cooper Family Farms
Ridge Protection Coalition	Little Creek
River Hacks	Saluda River
River Oaks	Saluda River
Rocky Branch Watershed Alliance	Rocky Branch
Rocky Creek Friends	Rocky Creek (2 sites)

Group	Associated Waterbodies
Save Our Saluda	North Saluda River (3 sites), Middle Saluda, South Saluda River, Oil Camp Creek
SC Sierra Club	North Fork Edisto River
SC Water Checkers	Trib to Rocky Creek
Simple Times Farm	Cedar Shoals Creek
Smith Branch Watershed Alliance	Smith Branch
Spartanburg Day School	Lawson Fork Creek
Stream Team	Merritt Creek
SWU Environmental Studies	Twelve Mile River (2 sites), Twelve Mile River/Lake Hartwell, Dongell Creek
Team Moore	Ranson Creek, Unknown waterbody
TeamUF	Richland Creek, Trib to Richland Creek
Tyger 10	Tyger River
Tyger River Foundation	North Tyger River
Upstate Master Naturalist Association	RC Edwards Creek, Pappys Creek
Wade Hampton Water Monitoring Team	Brushy Creek Feeder Stream
Waterloo Water Wizards	Dirty Creek, Burris Creek, Reedy River at Ekom Beach, Rabon Creek at Burris Creek, Lake Greenwood, Cane Creek at Rt 72 bridge, Hidden Lake (Crystal Bay area), Ravin Creek at Neely Ferris bridge, Lick Creek at Neely Ferry bridge
Watershed Ecology Center	Chinquapin Creek, Pollywood Creek, Butterfly Creek, Mud Creek, Holston Creek
WCA Team	Big Ferguson Creek
Wofford College	Lawsons Fork Creek at Glendale Shoals
WOW SC	Indian Creek, Eighteen Mile
Z's place	Fairforest Creek

Complaints Requiring a 24-Hour Response

DHEC's health facilities licensing complaint team triages complaints using a tiered system based on severity. Tier 1 complaints require a response within 24 hours and are the most severe situations where there has been, or likely will be, imminent danger, death, or serious physical harm to persons in the facility. A 24-hour response means that DHEC investigators will go onsite within 24 hours of the next working day to conduct the investigation.

Examples of tier 1 complaints include the following:

- Severe temperature in facility (*e.g.*, HVAC is not working)
- No medications in the facility
- No staff in the facility
- No food in the facility
- No water in the facility
- Serious fire and life safety issues (*e.g.*, smoke damage)
- Sewage problems
- Death of a resident due to non-natural causes such as alleged neglect, abuse, or elopement

In addition to tier 1, there are also tier 2, 3 and 4 complaints. Tier 2 complaints require a response within 30 days and include allegations related to tuberculosis (TB) test and infection control issues, level of care issues, a facility with no administrator, and lack of resident care plan or physical examination. Tier 3 complaints require a response within 60 days and include allegations involving improper resident or patient discharge, staff training issues, vermin, and lack of evacuation plan. Tier 4 complaints are other allegations of noncompliance and are investigated within 90 days.

Below is a summary breakdown of the tier 1 and tier 2 complaint investigations from 2015 to present.

Year	Tier 1 Complaints Investigated	% Investigated within 24 Hours	Tier 1 Complaint Investigations by Facility Type			
			Community Residential Care Facility (CRCF)	Nursing Home	Hospital	Other Types
2015	14	21%	11	1	1	1
2016	9	100%	6	1	1	1
2017	1	100%	1	0	0	0

Year	Tier 2 Complaints Investigated	% Investigated within 30 Days	Tier 2 Complaint Investigations by Facility Type			
			Community Residential Care Facility (CRCF)	Nursing Home	Hospital	Other Types
2015	640	44%	329	131	73	107
2016	757	88%	392	204	51	110
2017	388	91%	163	136	24	65

DHEC's health facilities licensing program has been implementing quality improvement measures to improve compliance with the tiered complaint investigation timeframes. These efforts include the hiring of additional staff and creating a complaint team, including nurses that triage and investigate complaints. Investigators also have been cross-trained to investigate all health facility types. DHEC's complaint team conducts a daily review of the complaint log for incoming complaints to determine the need for expedited investigations and also pulls data reports from the complaint log on a monthly basis to measure progress.