North Kent County PFAS Exposure Assessment

Community Meeting

November 27, 2018

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Focus of Community Meeting

- North Kent County PFAS Exposure Assessment Project
- If you have questions about the environmental investigation, MDEQ and USEPA have representatives here to answer those questions separately

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Community Meeting Overview

- Explain why MDHHS and KCHD are conducting an exposure assessment
- Provide details on what eligible participants should expect in the upcoming months
- Answer your questions about the project

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Exposure Assessment Background

- Since PFAS was discovered in this regions, MDHHS has applied CDC-ATSDR methods to investigate the public health risks from environmental chemical releases.
- Exposure Assessment is one step in the CDC-ATSDR methods.
- KCHD - MDHHS - ATSDR: on May 7th Research Team Formed

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Exposure Assessment Background

- DEQ identified numerous private wells with high levels of PFAS
- PFAS exposure from these wells likely occurred to some people for an extended period of time.
- PFAS can cause harm, but it takes time and the health effects are not unique.

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Exposure Assessment Background

- Following CDC-ATSDR methods, the community's chemical exposure is determined by blood testing and questionnaires.
- Exposure Assessment results will inform a determination on possible future health studies.
- CDC-ATSDR is planning a multi-site PFAS health study.

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Panel

Name	Topics
Brian Hartl, Epidemiologist	Background information
Eden Wells, Chief Medical Executive	Background information
Kory Groetsch, Environmental Health Director	Background information
Rachel Long, Epidemiologist	Details of eligibility, recruitment, water sampling, and results sharing
Ali Glazier, Epidemiologist	What to expect at the clinic

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Project Overview

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Purpose of this Exposure Assessment Project

- Learn the amounts of per- and polyfluoroalkyl substances (PFAS) in the blood of people from North Kent County who have PFAS in their private drinking water wells,
- Compare to amounts of PFAS in the U.S. population,
- Collect new water samples that represent current amounts of PFAS in the participant's private drinking water, and
- Identify factors that can affect how much PFAS is in people's blood.

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How an Exposure Assessment is Different from a Health Study

- Exposure assessment: amount of chemical in blood or urine
  - Compare between different groups of people
- Health study: amount of chemical in blood or urine and potential links to health conditions

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Project Design

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Number of Private Wells

Category	Total PFAS (counts)
Wells Tested	1,564
Wells with Detections	768
Well Results > 70 ppt	183

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Households are eligible if they:

1. Are on a private well tested by or at the direction of DEQ

2. Have a validated detectable amount of PFAS as reported to MDHHS from DEQ

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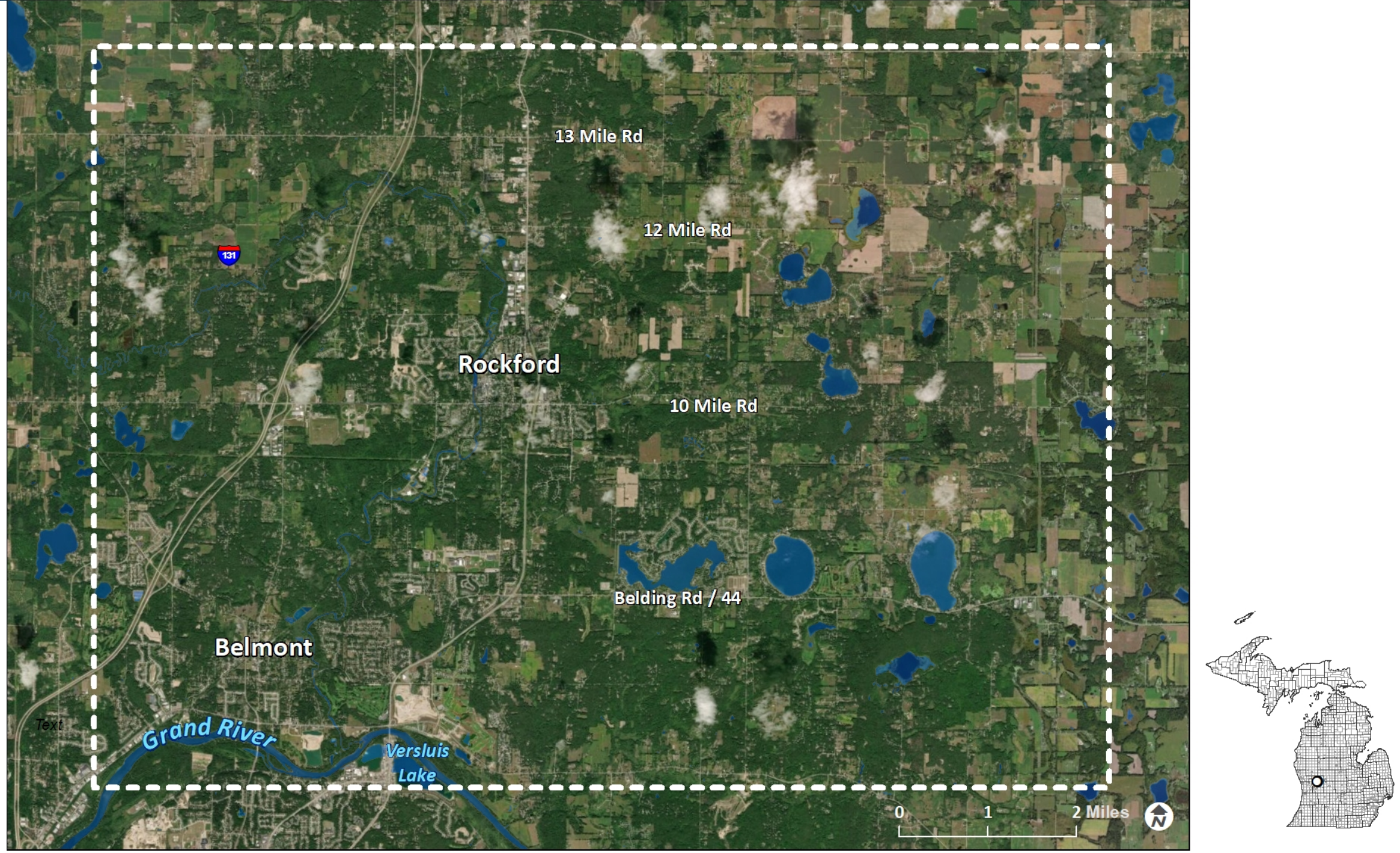
13 Mile Rd
12 Mile Rd
131
Rockford
10 Mile Rd
Belding Rd / 44
Belmont
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Grand River
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2 Miles
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Household Selection

Group 1

Less than 70 ppt Total PFAS

About 400 participants

Households have equal chance of being selected

Group 2

More than 70 ppt Total PFAS

About 400 participants

100% of households selected

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Individual Eligibility

Anyone **currently** living in a **selected** household may participate if they:

Currently live in & lived in the home before January 1, 2018

+

Used private well water as drinking water

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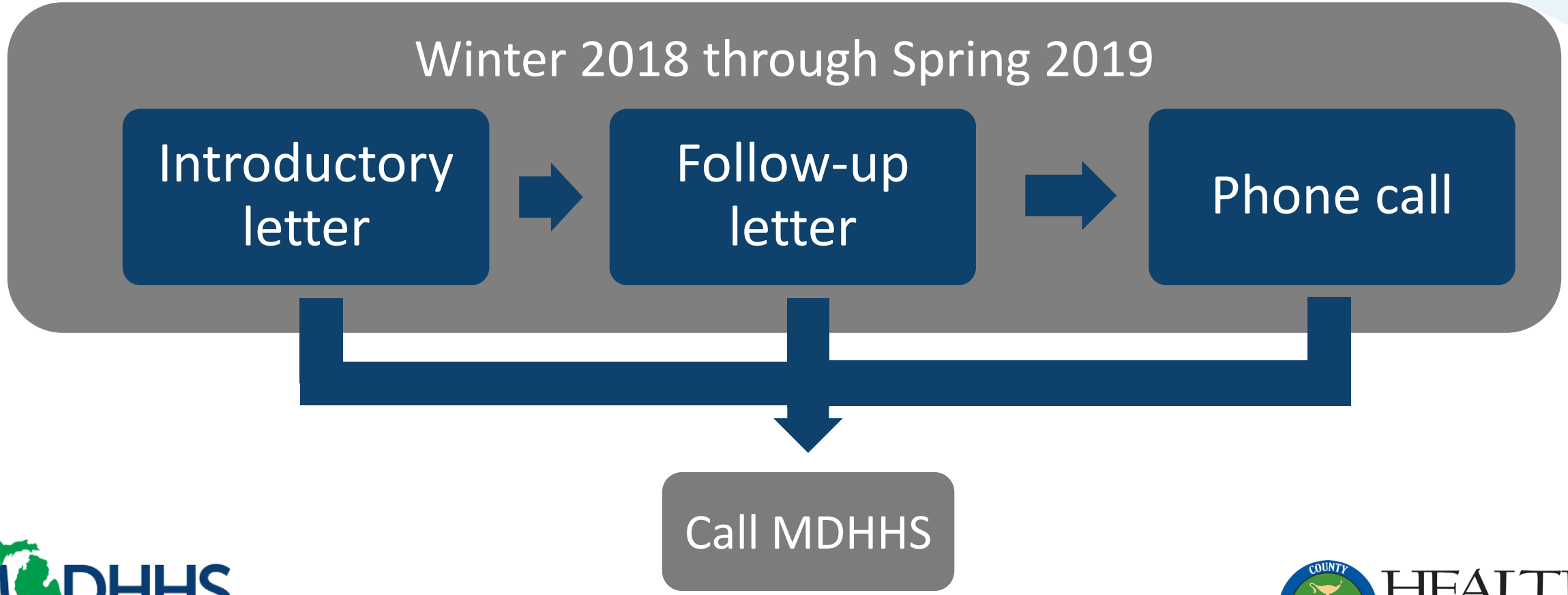
Recruitment Process



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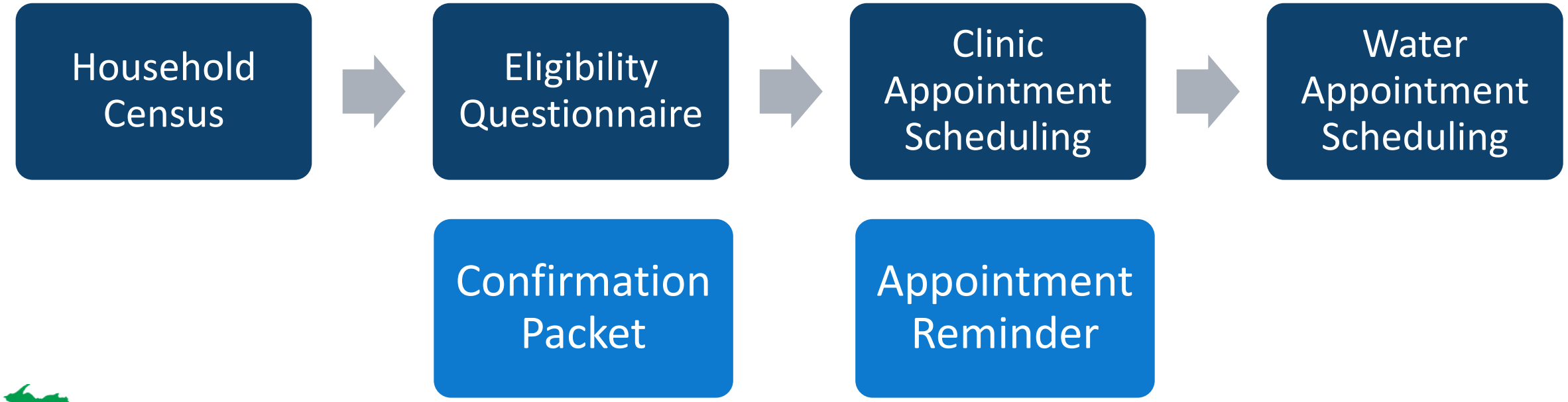
Call with MDHHS: What To Expect



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Clinic Design

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Clinic Details

Kent County Health Department

700 Fuller NE, Grand Rapids MI, 49503

- First Clinic to be held on December 8th, 2018.
- Additional clinics will be held in the following months.

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Clinic Design

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Appointment Types

- Individual
- Family
  - MDHHS will help families schedule appointments for the same time
  - Children will remain with parents during their appointment

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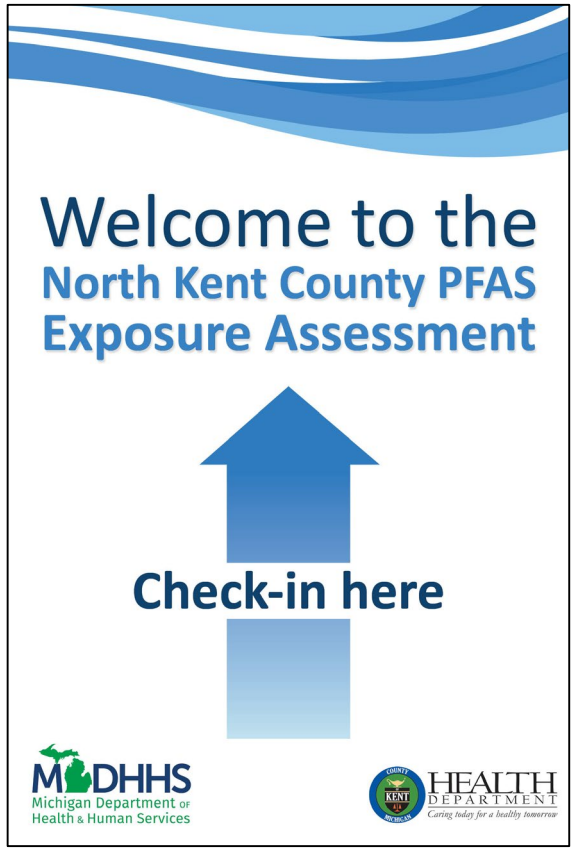
Check In

- KCHD and MDHHS staff will welcome you at the check in area of the Fuller Clinic
- Staff will be ready to start your appointment quickly
- There is a comfortable waiting room if interviewer is not available right away



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Informed Consent

- Before starting the questionnaire, the interviewer will read the informed consent with you
  - What to expect during the project
  - Your rights and privacy
  - Benefits and risks of participating
- We want to help you understand what being part of the project involves
  - All questions are good questions
  - Translation services are available

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Questionnaire

All Participants

- History of living in North Kent County
- Water consumption
- Local foods
- Demographics

Adults

- Factors affecting PFAS excretion
  - e.g. diabetes, kidney disease, pregnancy, menstruation
- Job history in PFAS-related industries

Adults with young children

- Breastfeeding and formula feeding

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Blood Draw

- After the interview:
  - You will be shown to a private room
  - A phlebotomist (someone trained to draw blood) will draw a small amount of blood from a vein in the arm
  - A smaller amount of blood may be drawn from children based on their weight
    - Note that infants under 16 pounds will not be able to participate in the assessment

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Check out

- After the blood draw:
  - You will be shown to the check out station
  - MDHHS and KCHD staff will be available to answer questions
  - You'll be given a reminder for your water sample appointment

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Water Testing

- MDHHS staff (sanitarian) will:
  - Arrive within the 2-hour appointment time window
  - Record water usage, plumbing, and filter information
  - Collect samples from both pre- and post-filter locations if filter is in use
    - Sanitarian will flush system (~3-5 minutes)
    - Flushing will assure samples are collected from the water well

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Laboratory Methods

- CDC PFAS method
  - Same method for blood and water
  - 24 PFAS analytes

- All laboratory testing will take place at MDHHS's Lab

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Communicating Results

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Results

- Individual blood results
  - Up to 4 months after blood draw
  - Will compare individual PFAS results to amounts of PFAS in the U.S. population
- Household drinking water results
  - Up to 4 months after sample is collected
  - Letter will be sent to adult who made the water sample appointment

All results will be kept confidential

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Overall Project Results

- Participants will:
    - Receive a copy of the final report when available
        - 1-2 years from final clinic date
    - Be informed of community meetings
    - Updates
        - Posted to www.accesskent.com/health/pfas and www.michigan.gov/belmont
        - Sent out via KCHD's email list

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Question and Answer Time

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To reach us later:

MDHHS: 800-648-6942

Monday-Friday 9 AM – 5 PM

KCHD: KCPFAS@kentcountymi.gov

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Additional Slides

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What are PFAS levels in the U.S. population?

Most people in the United States and in other industrialized countries have measurable amounts of PFAS in their blood.

The National Health and Nutrition Examination Survey (NHANES) is a program conducted by the Centers for Disease Control and Prevention (CDC) to assess the health and nutritional status of adults and children in the United States. NHANES (2011–2012) measured the concentration of PFAS in the blood of a representative sample of the U.S. population (12 years of age and older). The average blood levels found were as follows:

- PFOA: 2.1 parts per billion, with 95% of the general population at or below 5.7 parts per billion
- PFOS: 6.3 parts per billion, with 95% of the general population at or below 21.7 parts per billion
- PFHxS: 1.3 parts per billion, with 95% of the general population at or below 5.4 parts per billion